EVENT PUBLICATION

FEBRUARY 05 2025

BIM IN LEICESTER 2025

#BIM SERIES

Logo designed by Arya Anilkumar,
Year 3 BA architecture, Leicester School of Architecture

CONTENT

BIM IN LEICESTER 2025

BIM SERIES

WELCOME!

EVENT HOSTS

BIM IN LEICESTER 2025

BIM in Series Charity

BIM in Series is a collection of annual conferences, organised in order to raise funding for the BIM in Series Charitable Cooperative Group, registered in January 2024. Every year, a group of 30+ undergraduate and postgraduate students have worked together to support a BIM in Series conference, which brings together specialists, architects and designers to present their work on the topic of BIM (Building Information Modelling).

Hosted by a variety of different institutions, including Birmingham City University and De Monfort University, the conferences shine a light on cutting edge research and innovative BIM practice, attracting both researchers and practitioners from some of the most famous architectural practices in the world as guest speakers. Speakers at the BIM in Series of conferences have travelled from a number of countries to join us, including Chile, America, China, France, Sweden, Switzerland, Dubai, Denmark, Italy, Spain and Romania. Some of the that have been represented at the conferences include Zaha Hadid Architects; Foster and Partners; Rogers Stirk Harbour Partners; Bjark Ingels Group (BIG); Grimshaws; Heatherwick Studios; Mace; Maber Architects and Gensler. The BIM in Series of events has been operating for the last 5 years. In the summer of 2023, its co–founders decided to transition to charitable activities following discussions surrounding the ongoing financial crisis and awareness that this may hinder some students accessing or performing well within architectural education. The BIM in series therefore wanted to do something to support and as such, became a registered charity with HMRC in January 2024. Profits generated from our conferences via tickets and sponsorship donations are instrumental in supporting our developing charity initiatives and to provide ongoing support for future activities such as further events.

The BIM in Series Charity funding provides aid to students pursuing architectural education who are suffering from financial hardship and provides support to those with a vested interest in the betterment of architectural education.



The Leicester School of Architecture

De Montfort University is embedded in Leicester city's social and physical infrastructure. It is the educational global lead for the UN Sustainable Development Goal 16, supporting peace and justice. It identifies with the local while building global connections, reframing how we live in the world as environmentally responsible and ethical citizens.

The university has a diverse student and staff body, and Equality, Diversity and Inclusion are integral to its identity The school was established in 1897 as part of the Arts College with Architecture. As a part of the Faculty of Arts, Design and Humanities, currently, it sits within the larger school of Art, Design and Architecture, and as such it benefits from the synergies its shares with other related disciplines.

The school of architecture is a founder member of the Leicester Urban Observatory in collaboration with Leicester City Council and two other local universities. Its research agenda draws on its international identity and concern with diverse cultures and histories as well as on regenerative practices, social sustainability and ethical practice. In its teaching and learning, the school has decolonisation of the curriculum at the forefront of its agenda in humanities, studio and professional practice teaching. The climate crisis and ethical practice are engaged with in the inclusion of real-life briefs and community partners in BA, and with live-build projects in postgraduate level, based on interdisciplinary design and collaborative practice.

Leicester School of Architecture promotes ethical, regenerative architectural thinking and practice with a view to attaining environmental and spatial justice.

DE MONTFORT UNIVERSITY LEICESTER

PAST EVENTS

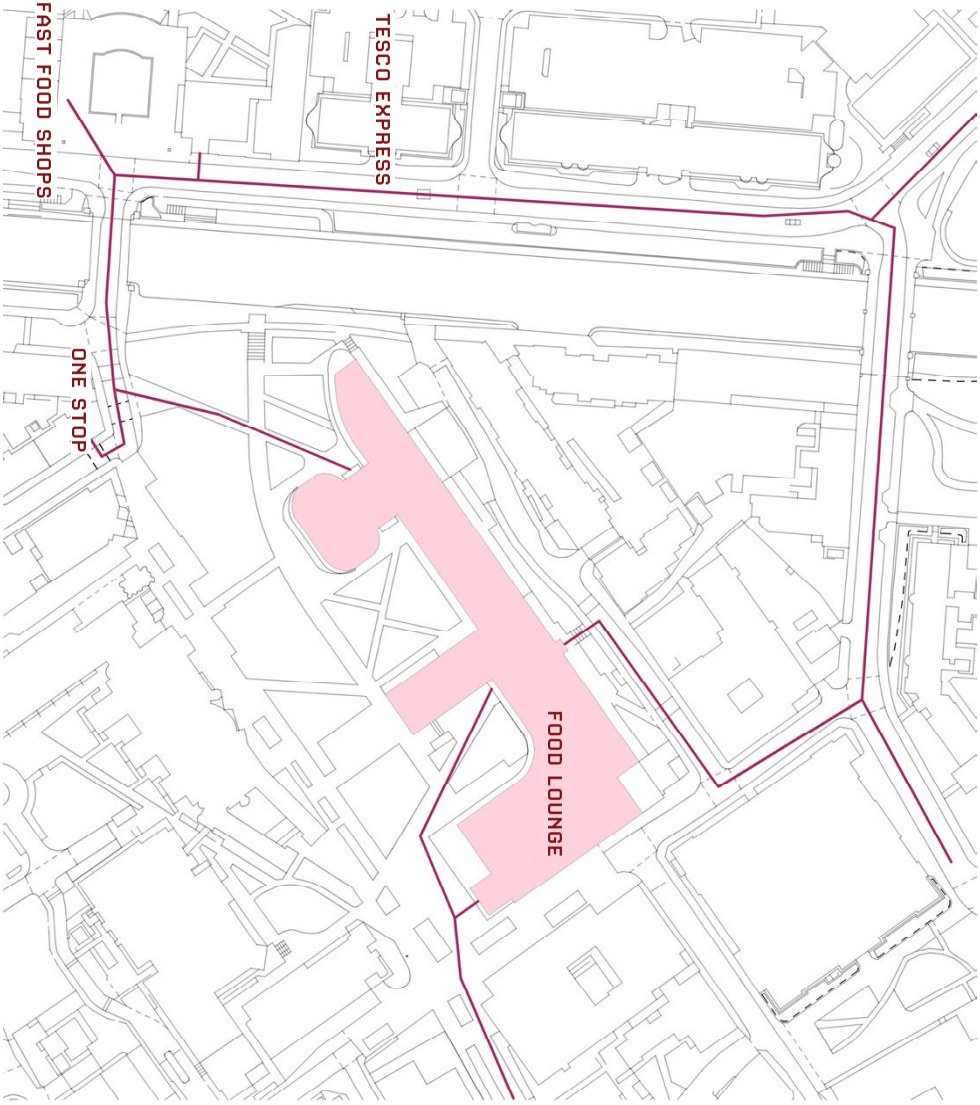
BIM IN SERIES

PAST EVENTS

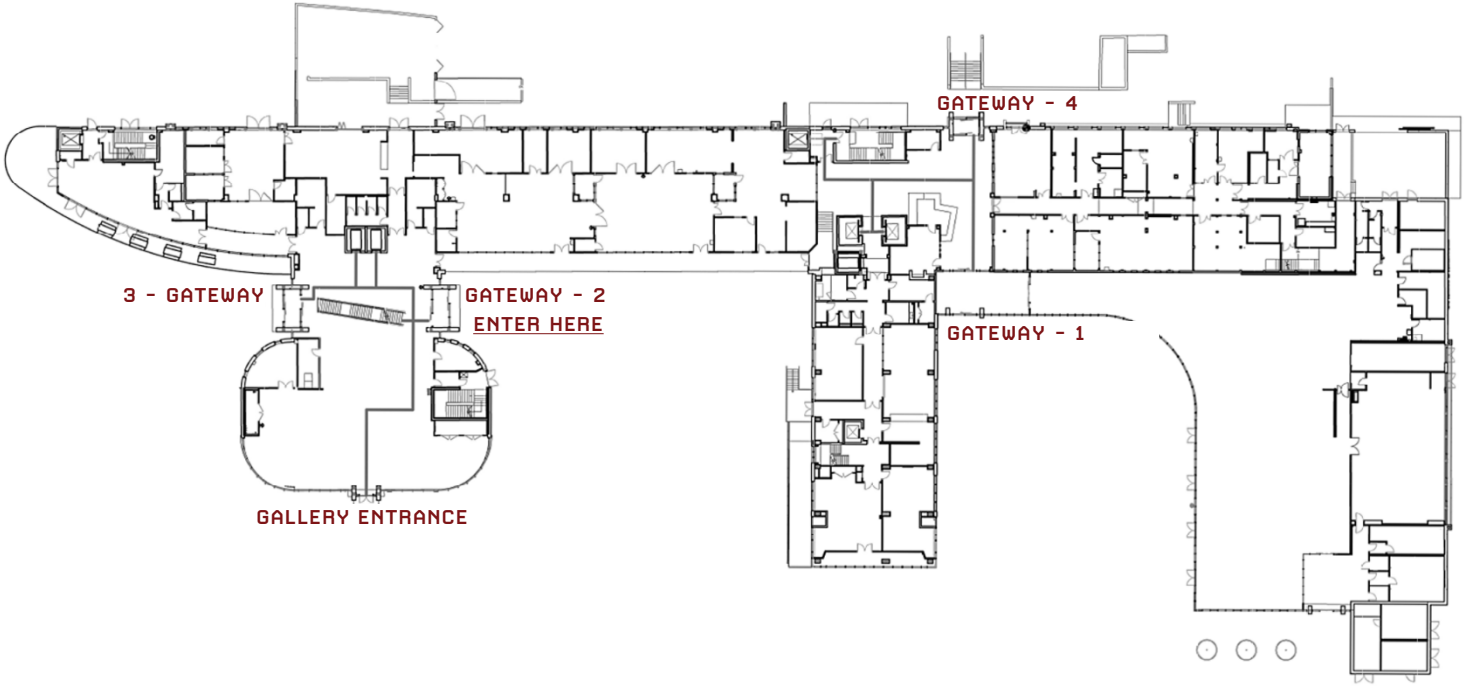
BIM IN SERIES

NAVIGATION

DE MONTFORT UNIVERSITY

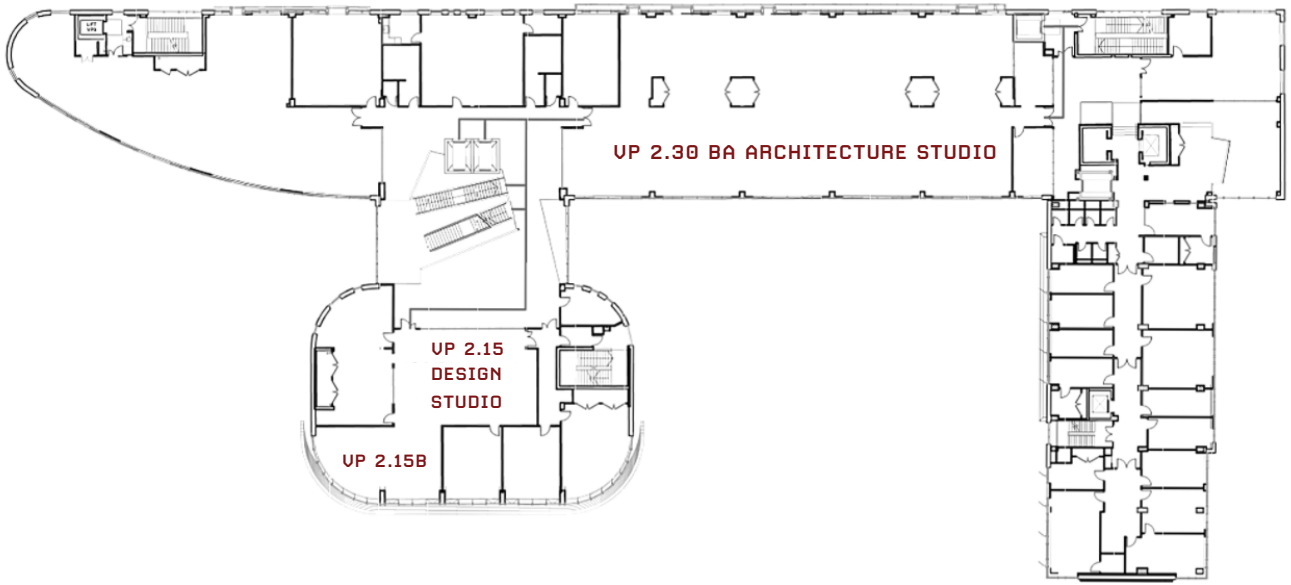


THE VIJAY PATEL BUILDING - GROUND FLOOR

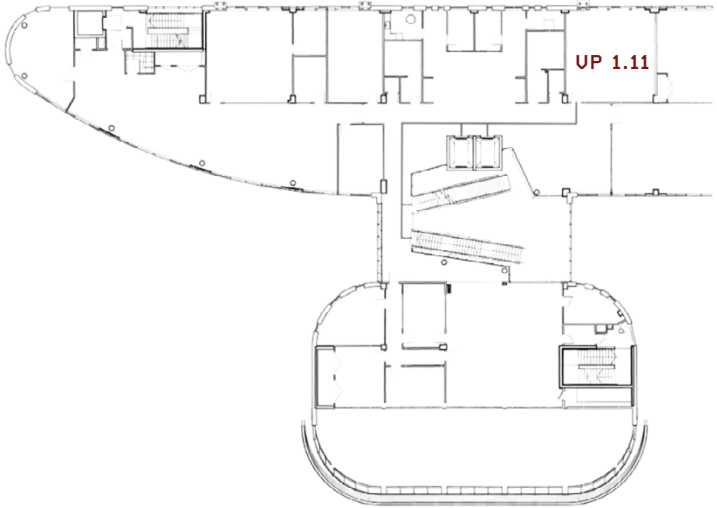


NAVIGATION
DE MONTFORT UNIVERSITY

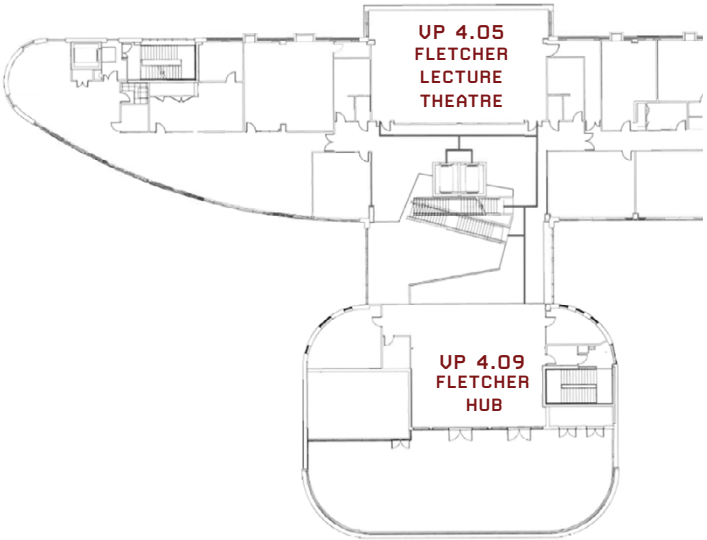
THE VIJAY PATEL BUILDING - SECOND FLOOR



THE VIJAY PATEL BUILDING - FIRST + FOURTH



FIRST



FOURTH

TIMETABLE

BIM IN LEICESTER INTERNATIONAL CONFERENCE

9.00	9.15	Outside, VP4.05 (4th Floor, VJP)				
9.15	9.20	VP4.05	Victoria Farrow, Leicester School of Architecture, BIM in Series Charity	Welcome and conference opening		
9.20	10.00	VP4.05	Alfonso Mondero, Heatherwick Studio	Embracing AI Without Losing Your Identity: A Humanized Approach		
Rooms						PLEA
Panel Chairs			Dr Jieling Xiao, Birmingham City University, Dr Jamileh Manoochehri, Leicester School of Architecture		Dr Amal Abuzeinab, Leicester School of Architecture, Emre Suner, Chris Bicknell, Leicester School of Architecture	
Room Themes			BIM | Share a Project with Us		BIM | Share a Project with us + AI	
10.10	10.35		Tamina Alhassan, Turner and Townsend	BIM in Practice: A BIM-Driven approach for project delivery	Dave Philp, Cohesive	A digital built environment - state of the nation
10.35	11.00		Josh Crystal, Maber	Midland Metropolitan University Hospital: A digital journey	Dale Sinclair, WSP	WSP's kit of parts approach point towards the future of construction where buildings are delivered faster, greener, better, safer and cheaper.
11.00	11.25		Brandon Roberts, Centre for Alternative Technology	Learning HBIM - Lampeter Old Building	Aleksander Gil, Parametrix Ltd	AI–driven Scan-to-BIM, how deep learning processes can boost efficiency in surveying and design
11.25	11.50		Jhara Shukla, Mace	Information Management Using BIM at mace Theme: Share a Project	Hua Zhong, London South Bank University	Advancements in Building Information Modelling: Integrating AI, Blockchain, and Sustainability
11.50	12.15		Dan Chesson, Bond Bryan	The BIM Olympics! Lyon 2024, Shanghai 2026, Aichi 2028.	Andreas Galatoulas, AECOM	AI Shenanigans: Wow the board, Wing the rest
12.15	12.40		Marwan Satti, Gensler	BIM ACC, coordination and Navisworks	Des Fagan, Lancaster University	AI:Lab (Artificial Intelligence for Low Carbon Building) – A Case Study on the Integration of AI into Building Design Workflows
12.40	12.50					
13.00	13.45	VP 2.30				Networking Lunch (Speakers, Sponso
13.50	14.00	VP4.05	Victoria Farrow, Leicester School of Architecture, BIM in Series Charity	BIM in Series charity | where we've been and where we're going!		
14.00	14.40	VP4.05	Dr Mersha Aftab, Birmingham City University, Dr Mey Goh, Loughborough University, Dr Irina Yevesyva, De Montfort University	Empathy-led self-assessment tool: Unlocking Digital Workforce Readiness		
14.40	15.20	VP4.05	Mark Linteton, Foster + Partners and Mark Shilton, CIAT, Nottingham Trent University	A collaboration. The use of CDE's and BIM in Education with Foster and Partners.		
15.20	15.50	VP4.05				The BIG BIM debate!.
15.55	16.35	VP4.05	Jason Taylor, Manchester School of Architecture	Age of AI: A New Paradigm for Architectural Digital Literacy		
16.35	17.10	VP4.05	Oliver Thomas Facit	The Future of housing using BIM to Manufacture and Microfactory's to build sustainable homes.		
17.10	17.20	VP4.05	Victoria Farrow,, Leicester School of Architecture, BIM in Series Charity, Stefan Fratila, BIM in Series Charity and the Volunteer team	Closing Comements - Onto BIM in Leceister 2026!		

Registration and coffee

SE SEE PRINTED TIMETABLE FOR ROOM NUMBERS

Dr Mersha Aftab, Birmingham City University, Dave Peacock, Operance, Matthew Blakeley, RIBA East Midlands		Analstaysia Luban, Manchester School of Architecture, Vinesh Pomal, Leicester School of Architecture, Ryan Steed, Teepee Materials Handling		Dr Alona Martinez Perez, Leicester School of Architecture, Jake Hancock, Leicester School of Architecture, Dr Dingayo Mzyece, Leicester School of Architecture	
BIM + Implementation		**BIM IN Education**		**BIM + AI**	
Melanie Robinson, Women in BIM	Nurturing a digital culture: Lessons in training and implementation	**Sarah Davidson, University of Nottingham**	Approach to developing student knowledge and skills: BS EN ISO 19650 and geometrical modelling	**Allister Lewis, ADDD**	Disrupting the ConTech Landscape- Exploring the growth in AI, ConTech, and how to search, assess test and report on software.
Michael Hudson, CBRE	If BIM is the answer, what was the question? – Exploring digital experience use cases	**Ana Karina, UWE Bristol**	Navigating BIM Education: Best Practices and Overcoming Challenges in UK Universities	**Alberto Fernandez, UCL**	Interrogating Diffusion Models for Adaptive Architectural Design
Luka Stefanovic, Vectorworks	Lead the BIM Way with Digital Skillset	**Dara Burke, ATU, Sligo**	The digital studio	**Dr Mohammad Mayouf, Birmingham City University**	The Data Odyssey: Navigating Digital Construction through data lenses Across the Building Lifecycle
Dr Farres Yasser, Lincoln University	BIM for Us: A Human & Environment-Centred Approach	**Dr Paul Vasantharaj, Huddersfield University**	BIM in our curriculum of Built Environment courses.	**Dr Marzia Bolpagni, Mace**	When the Information Manager meets AI
Daniel Stephen, MEP BIM department	How building regulations should be written to leverage automatic compliance checking of building model for faster checks and less human errors	**Seb Ison Jacques, Birmingham City University**	Using BIM protocol to assis in the prevention of suicide rates in the construction sector.	**Dr Asem Al Bunni, London South Bank University**	BIM in education while highlighting the latest BIM technologies in practice
		Dr Cornelia Tuglui and Jaime Ingram Solis, Airc Digital	Open BIM, how it helped Airc Digital and the importance of passing this knowledge to the next generation	**Dr Derek Hales, University of Salford**	media infrastructure spaces

Questions and discussions

rs and Panel chairs only) Please see conference brochure for details on other lunch ventues *

.... Should BIM be taught in the Design Studio? If so, where?

EVENT THEMES

THEME 1: BIM + Share a Project

Our Share a Project theme will showcase ground breaking projects that leverage BIM technology to transform how we design, build, and manage infrastructure.

This session will bring together experts to share real-world case studies that highlight the power of BIM in creating smarter, more efficient buildings and cities. Whether you're seeking inspiration or practical insights, this is your chance to learn from the best in the industry.

THEME 2: BIM + Implementation

Embrace the power of digital transformation in construction!

BIM + Digital Implementation and People-Led Digitisation explores streamlining processes and improving productivity through the use of BIM. This theme also investigates people-led digitization and in particular how teams and organizations are adapting to new digital tools and practices in the real world.

Come and discover how leading professionals are driving innovation by putting people at the heart of digital change!

THEME 3: BIM in Education

Unlock the future of construction and design! Join us for BIM in Education where we will explore how universities and leading industry practices are revolutionizing learning and the implementation of Building Information Modeling (BIM) in offices and in classrooms

Whether you're a student, educator, or practitioner, this session will look at the skills and knowledge needed to thrive in the ever-evolving world of digital construction and understand more about how BIM is being taught.

THEME 4: BIM + Artificial Intelligence

BIM + Artificial Intelligence asks speakers to explore the intersection of Building Information Modelling and Artificial Intelligence. Speakers are invited to showcase how AI is revolutionizing the way we design, construct, and manage buildings.

From predictive analytics to autonomous systems, we are interested to hear from speakers on where AI is unlocking new possibilities in the world of BIM.


Heatherwick studio

VICTORIA FARROW

FOUNDER

Victoria is an associate professor, subject lead in architecture and the built environment at the Leicester School of Architecture, DMU, educator, designer and practising architect with experience across multiple sectors of the built environment.

In practice, Victoria has worked within the fields of architecture, planning, facilities management, building information modelling (BIM), occupancy planning, architectural visualisation and interior design. As an educator, Victoria has always been passionate about architectural education and throughout her academic career, she has developed connections with individuals and institutions across the UK as well as in the USA and South Africa, which have provided her with the opportunity to teach internationally and also collaborate on numerous projects and research activities.

Most recently she has joined the board of directors for 'a students perspective', which is an audio podcast highlighting the interior architecture and design community through a series of recorded interviews in the USA and UK. In 2024, Victoria gave a podcast interview on Archemia, Brick + Block and the Broke Architects podcast "conversations with an architectural educator" and describes herself as an activist, working in favour at all times for positive change within architectural education. In 2011, Victoria co-founded the aae (association of architectural educators), which was formally announced in 2013 as the first association representing architectural educators in the UK. The aae was further supported by Victoria's network in the USA with the NCBDS (national conference on the beginning design student) conference. Victoria organised and chaired the inaugural aae conference in 2013 and alongside aae colleagues, launched the aae journal, Charette, which remains the only journal on architectural education in the UK. Victoria has continued to support aae conferences as the director of events, on the conference and journal editorial committee and through research presentations on architectural education.

In 2013, Victoria set up the 'aae and Vectorworks scholarship programme', which provides free software to UK architecture schools. This initiative was showcased at the Vectorworks 2017 summit, Chicago, USA. Between 2010 and 2014, Victoria taught at Lincoln University, NTU, Marywood School of Architecture, USA, Penn State University, USA and BCU cross multiple courses including architecture, interior architecture, architectural technology and BIM. At BCU Victoria held the role of Course Leader for BA architecture and Year 1 lead for almost 10 years and became associate professor In 2018, working across the faculty within marketing & recruitment.

Victoria created a new initiative, BIM camp ,in 2017, following the government white paper about BIM in 2016. BIM camp was set to 'educate the educators' and bring together architects with industry specialists and software companies to learn about BIM. The event was so successful and popular in demand, that she set about creating the first educational BIM conference in 2018, which became BIM in Birmingham. BIM in Birmingham quickly became is a suite of conferences organised by students from UG and PG courses delivering presentations from globally recognised practices to audiences from around the world. In January 2024, Victoria founded and registered the 'BIM in Series' charity, which raises funds for the betterment of architectural education and for architecture students suffering financial hardship. BIM in Birmingham continued as a conference throughout 2017, 2018, 2019, 2020 and 2022. In August of 2023, Victoria left Birmingham City University to take up her new position as Head of Subject in Architecture at the Leicester School of Architecture, where she formed BIM in Leicester 2024. The BIM in Series suite of conferences has become internationally recognised.

Alongside her work, Victoria is passionate about 'healing the gaps' between academia and professional practice. In 2023, she formed a new network called Architecture Plus. The network represents people within architecture and the built environment, within education and industry, that are working with challenges. This strikes a harmony with Victoria's role as head of equality, diversity and inclusivity lead at De Monfort University. She also recently launched a journal call as guest editor for the journal, Astragalo, entitled 'Blurring the gaps', which calls out to educators and practitioners to write on the topic of what can be done and is being done to build bridges between the two. Victoria is part of the new SCHOSA education working group, which seeks to ascertain and discuss emerging models for the new standard structure of architectural education in the UK.

In 2018, Victoria became an associate professor and has since been working across the faculty of art, design and media within the field of marketing and recruitment alongside her course duties, which have permitted her to gain experience. writing multiple courses and managing her team through the RIBA validation process. In her role at the Leicester School of Architecture, she remains passionate about architectural pedagogy and building confidence within the next generation of architects.

ARCHITECTURE PLUS

She is currently working on developing the network Architecture Plus, which is a celebration of those in architecture who are working within the profession or within the realm of architectural education PLUS managing additional challenges alongside their day to day roles.

Architecture Plus is an opportunity to spotlight inspiring stories of leadership, talk with others about overcoming adversity and share experiences of success despite some of the most difficult circumstances.

STEFAN FRATILA

CO-CHAIR

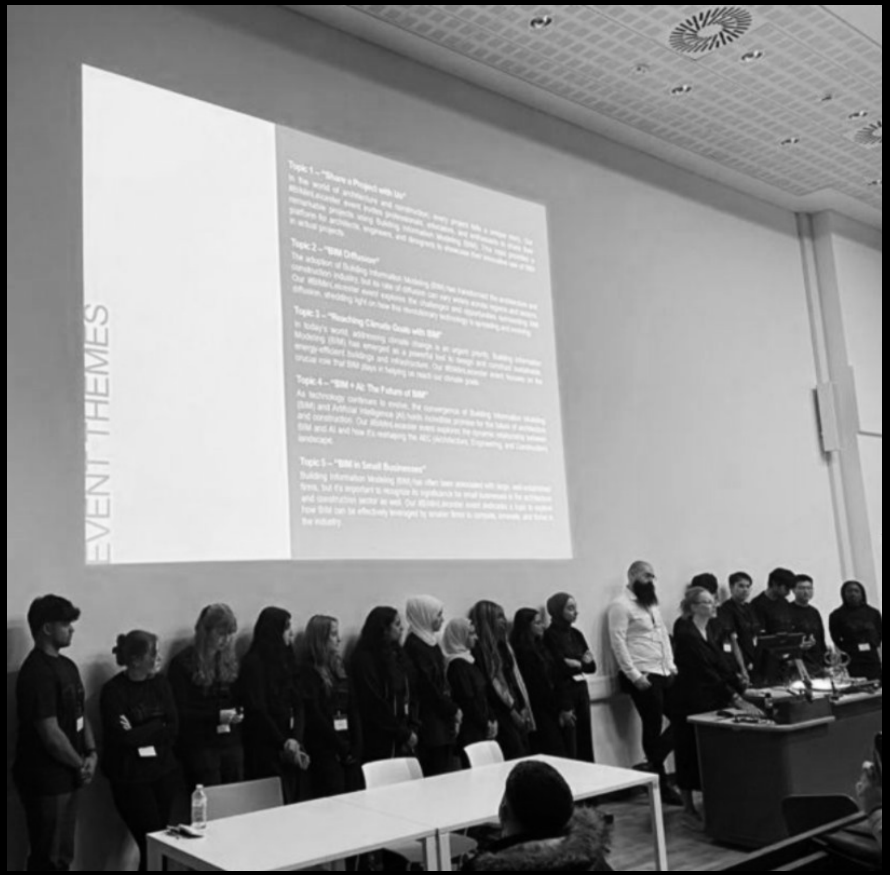
Stefan Fratila Co-Host – BIM in Series Stefan Fratila, an accomplished Part 2 Assistant Architect, serves as a co-host at BIM in Series, bringing a wealth of diverse expertise and a passion for innovation, sustainability, and the transformative potential of Building Information Modeling (BIM).

With three years of professional experience in the field of architecture, Stefan's career has been defined by a commitment to design excellence and delivering impactful solutions. He has successfully navigated projects of varying scales, from intricate small-scale designs to ambitious large-scale developments, always striving to create immersive experiences that enhance the quality of life. At the heart of Stefan's architectural philosophy lies a strong belief in the power of collaboration.

He understands that successful architectural endeavours are the result of synergy between architects, clients, and multidisciplinary experts. Open communication, relationship cultivation, and nurturing shared visions are the cornerstones of his approach. Stefan's professional practice is rooted in Building Information Modeling (BIM), which he views not just as a tool but as a transformative mindset. He champions the comprehensive integration of BIM within the industry, recognizing its potential to revolutionize project workflows, enhance efficiency, and elevate decision-making throughout the project lifecycle. Furthermore, Stefan is a strong advocate for the strategic use of architectural software. He firmly believes in utilizing the right software tools at each project stage to optimize results.

His methodology is marked by the strategic selection and application of software to achieve project goals. If you share Stefan's dedication to innovative architecture, sustainable design, and the transformative potential of BIM, he welcomes you to connect. Explore opportunities for collaboration, idea exchange, and the pursuit of architectural excellence alongside him. Stefan is readily available to embark on this creative journey of growth and achievement.

Relevant Work Experience: D5 Architects – 2023 – Present The BimCrowd – 2021-Present Visiting Tutor at Birmingham City University – 2022-Present Choral Studio – 2019-2020 Internship – A2 Architecture – 2018 Internship – Fabric – 2018 Volunteer – Chairman –Co-Organiser- BIM in Birmingham – CPD for BIM Level 2 compliance 2017 – Present Internship – 3D Reid Birmingham – 2017 Stefan is readily available to embark on this creative journey of growth and achievement.



BIM 2025 TEAM

Azrah Jussab
Hima Halim
Nana Abban
Neelkumar Wala
Adela Rezaei
Aisha Swele
Ali Hayati
Anjel Rajesh
Arya Anilkumar
Ashwin Stanly
Chelsea Cariazo
Emily Bailey
Irina Temciuc
Krystal Cunningham
Maryam Sajid
Misbah Rehman
Nilufer Vural
Sidney Luke Wen
Jian
Sangeeth Shripharan
Stefan Fratila
Shanya Seniaray
Riko Sach
Teodor Stoykov
Zuhdi Mohamad Zuhdi Alamad
Zübeyde Yeşilyurt Tunç
Ieen Sawaf
Sophie Roper-Hall
Jacob Doherty
Victoria Farrow

#BIM SERIES

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BIM IN LEICESTER 2025

AV ARCHITECTURE VOGUE

ArchAdemia.

Founded by the directors of Studio RBA, a top architecture firm in North-West England, ArchAdemia began with step-by-step tutorials to train our own team. Video training accelerated development for graduates and young architects. Our first podcast introduces the platform, founders, and our future objectives.

VECTORWORKS®

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BIM SERIES

PANEL SPEAKERS

PAUL VASANTHARAJ

Senior Lecturer in Construction Project Management

Paul is an enthusiastic, dedicated, tech-savvy and system-oriented Educator & Researcher in Construction and Project Management with a strategic vision of technology-driven construction through competency-based education & training for efficient project delivery & enhanced value creation. He is presently serving as Senior Lecturer in Construction Project Management at the University of Huddersfield, UK. Paul is leading two courses in Construction and Project Management at undergraduate and post-graduate levels. He has been program lead for various graduate programs of RICS SBE and served as the Program Director of MBA in Construction Project Management (MBA-CPM) before joining University of Huddersfield.

Paul is a Chartered Surveyor (MRICS), Project Management Professional® (PMP®) and Certified Knowledge Manager (CKM). He is a member of Standards Consensus Committee of PMI and a Disciplined Agilist. Paul is also a supervisor, counsellor and assessor for RICS Assessment of Professional Competencies (APC). He has designed and delivered several professional development programs at RICS and elsewhere. Paul has been successfully leading various small teams all through his career and a perfect collaborator. Paul has 25+ years of rich experience in the built environment practice and academia. He has the versatile experience of teaching undergraduate and graduate courses/modules in Construction Management, Digital Construction and Project Management for Architecture, Engineering & Business Administration (in Real Estate & Construction Project Management) students.

BIM in/for Built Environment Education

Despite the proven capabilities of BIM in efficient project delivery and value creation, there has been a slower adoption of BIM in Built Environment (BE) projects at various life cycle stages due to capacity issues and more. There are challenges in integrating BIM in curriculum of BE courses such as Construction Project Management & Quantity Surveying at the undergraduate & post graduate levels. I will talk on our approach in Huddersfield in integrating the BIM in our curriculum and share some experiences from a research project that I was involved in funded by Autodesk in developing a BIM Studio for construction education.

University of HUDDERSFIELD
Inspiring tomorrow's professionals

ALLISTER LEWIS

Architect, BIM Manager and the founder of Automated Data Driven Design

Disrupting the ConTech Landscape- Exploring the growth in AI, ConTech, and how to search, assess test and report on software.

The presentation "Disrupting the ConTech Landscape" discusses the rapid evolution of construction technology (ConTech) and how AEC (Architecture, Engineering, and Construction) professionals can navigate and adopt these innovations effectively. It opens with an introduction to the growth of digital tools, emphasising the role of AI in accelerating the pace of change and how it's reshaping workflows in the industry. A significant focus is on developing a technology vision for organisations, ensuring that technology adoption aligns with long-term goals. It highlights key questions for setting this vision, such as what the organisation aims to achieve and how technology can address its most pressing challenges. The presentation includes case studies demonstrating how companies have successfully integrated tech strategies, such as virtual desktop adoption, AI-driven bidding automation, and comprehensive BIM gap analysis. The ADDD Marketplace is presented as a solution to help AEC professionals search, review, and implement ConTech solutions efficiently. The marketplace, which already features over 50 categories of software, is designed to connect users with relevant solutions, making it easier to overcome the time and resource constraints professionals face when searching for tools. Challenges highlighted include the difficulties professionals have in finding the right solutions and the hurdles ConTech companies face in gaining visibility. The presentation underscores the importance of consistent benchmarking when assessing new software and suggests a framework to aid both professionals and vendors in evaluating solutions. To address implementation barriers, the use of Virtual Desktop Infrastructure (VDI) as a safe, secure testing environment is recommended, which allows organizations to try web and desktop applications without internal IT constraints. Additionally, report writing tools are advocated to help AEC professionals gain faster approval for new technologies by streamlining decision-making processes. The overall vision outlined is to revolutionize the AEC industry by fully integrating BIM, AI, and automation, raising efficiency, and empowering professionals to focus more on innovation and less on routine tasks.

Allister Lewis is an Architect, BIM Manager and the founder of Automated Data Driven Design (www.addd.io). Allister is a specialist in new Construction Technology (ConTech) software for Architecture, Engineering and Construction (AEC). He is a passionate advocate of digital tools in the construction industry and the opportunity that this offers to be better, faster, and more profitable.

Allister's background includes working as an Architect and BIM Manager within the public and private sector and has experience working across multiple building typologies – residential, education and mixed use.

Allister has an MSc in BIM and a deep understanding of the implementation of AEC software within construction consultancies. Allister has created the ADDD Marketplace (www.addd.io) which is the central resource for AEC ConTech software and services. The vision for this is to provide seamless access to all ConTech software through a digital marketplace, with users able to search, test, review and report on solutions that meet their challenges

DR FARRES YASSER

Senior Lecturer / Programme Leader

Farres has been in academia since 2013, specializing in teaching and researching sustainable solutions.

With a professional background in architectural systems engineering and an MSc in Sustainable Building Engineering, he focused on simulations comparing community-driven architecture with public housing settlements. His PhD in Material Science (Civil Engineering) centres on developing compostable insulation for Grade II listed homes, where he designed, tested, and implemented his own insulation panels.

He has created and delivered modules that integrate sustainability into various disciplines within the built environment, including civil engineering, energy systems, and architecture.

His courses cover urban planning, design studios, material use, product design, working drawings, and innovative strategies for insulation and passive heating and cooling technologies.

UNIVERSITY OF LINCOLN

BIM for Us: A Human & Environment-Centred Approach

This discussion on Building Information Modelling (BIM) in education centres around making BIM more human-cantered—connecting this powerful tool directly to our unique needs as a global community.

We'll explore an approach to BIM that respects and adapts to our diverse cultures, regional contexts, and varying levels of material and technological resources. The goal is to envision BIM as a practical, accessible, and affordable solution, not something limited to large-scale projects or complex software. Instead, we'll look at how BIM can empower projects of all scales and simplify rather than complicate the construction process, making it a tool that truly serves humanity's broader aspirations in the built environment.

Topics that will be covered include:

1. Rethinking Sustainability in Our Field: How can we redefine sustainability in our discipline by learning from past advancements and integrating new insights? What should be the true focus of BIM in light of today's technological progress?

2. Human-Centered BIM for Local, Affordable, and Contextual Projects: How can BIM prioritize projects that utilize local materials, balance high technical standards with affordability, and respect cultural and contextual needs? Vernacular design isn't necessarily low-tech, and BIM doesn't automatically imply high-tech. Exploring ways to blend these four approaches could inspire how BIM can better serve people, other species, and the environment.

3. Analysing BIM's role beyond aesthetics to ensure it truly adds value when used.

BRANDON ROBERTS

Sustainable Conservationist

Learning HBIM - Lampeter Old Building

This talk aims to cover a project that utilised HBIM, discussing what we learnt from the process, as well as the potentials and challenges of its use in industry: Lampeter, in Wales, hosts one of the oldest University campuses in the UK, after Oxford and Cambridge.

The Lampeter Old Building was designed by Charles Robert Cockerell in 1822–7 in a simplified Tudor Gothic style, and it is currently owned by UWTSD. The aim of the project was to create a digital twin of the Lampeter Old Building for use as an asset management tool for the estates team at UWTSD.

There is also educational potential for students in developing digital skills around HBIM and working with existing buildings. Utilising a Leica RT360 Terrestrial Scanner, a point cloud of the building was produced. This was then brought into Autodesk Revit to develop a usable architectural model; in which assets, such as lighting, can be defined and placed within the model.It was later brought into Twinmotion, a renderer, so that it can be viewed in Virtual Reality, in which students from CAT could get hands on with the technology.

Brandon is a sustainable conservationist – an advocate for reusing and maintaining our existing built environment through conservation, particularly through retrofit and restoration. All whilst advocating the use of traditional construction methods and natural materials. Brandon is a graduate of UWTSD, having studied BSc (Hons) Architecture between 2019–2022. Discovering the world of architectural conservation during his second year when working on a design for the retrofit of an existing chapel. He worked as a Part 1 Architectural Assistant at Darkin Architects, supporting a variety of domestic projects primarily in RIBA work stages 1–4. He then went on to do freelance work with UWTSD as a support for the architecture course, aiding students develop digital skills in Revit and AutoCAD. He is currently working as Technical Demonstrator and Architectural Staff at CWIC, developing and supporting the creation of architectural models, VR/AR demonstrations, 3D printing and module delivery. His work at CWIC includes the development of architectural digital twins of existing building through the use of point clouds and scanning technology. In addition to supporting the Passivhaus training project for Carmarthenshire – 'Efficiency Without Compromise'. He is also a masters student at CAT (Centre for Alternative Technology), studying Sustainable Architecture. Where he is honing his interests in architectural conservation and sustainable design further. For the future, he hopes to be apart of positive change for the AEC industry, shifting it away from new construction to a focus on a truly sustainable mindset through conservation efforts.

Canolfan Arloesi Adeiladwaith Cymru
Construction Wales Innovation Centre

ALEKSANDER GIL

Founder of Parametrix

Aleks, the founder of Parametrix Ltd. is a dynamic force in the UK's construction and facility maintenance sectors, known for his innovative application of Building Information Modelling (BIM) tools. His career transitioned from aiding architectural firms in adopting building information processes to fulfilling a government mandate, to launching his own start-up. This venture has evolved into a leading BIM consultancy, specializing in new construction project management and Scan-to-BIM for existing structures.

His current focus lies in integrating artificial intelligence into construction workflows, with an ambitious goal to automate surveying processes. This initiative aims to refine surveying efficiency and precision, particularly in producing asset information models.

Aleks' involvement at the conference brings a unique perspective, combining technological innovation with industry expertise, poised to offer valuable insights into the future of construction and maintenance

AI-driven Scan-to-BIM, how deep learning processes can boost efficiency in surveying and design

Are you intrigued by how AI can interpret and analyse architectural structures? Join us as our founder dives into cutting-edge research and innovative advancements, with a focus on deep learning methods that are reshaping the field of automated point cloud feature recognition.

This talk will unravel the challenges and breakthroughs in leveraging advanced neural networks to process 3D file formats, a pivotal frontier for machine learning practitioners and enthusiasts. Discover how a small, dynamic business is pioneering the use of AI to classify point clouds, unlocking new efficiencies in delivering asset information models.

By incorporating transformative methods like Point Transformers, we are tackling the complexities of spatial data processing to automate traditionally labour-intensive tasks in surveying and design.

This session promises an honest and insightful discourse on the opportunities and challenges of integrating AI into real-world workflows. Don't miss this chance to explore the transformative potential of AI in building design, surveying, and beyond.

PARAMETRIX

SARAH DAVIDSON

Professor of Information Management

Approach to developing student knowledge and skills: BS EN ISO 19650 and geometrical modelling

Sarah will set out her rationale for developing student capability in geometrical modelling and aspects of BS EN ISO 19650–2 in the context of the built environment and the move towards digitisation.

She will discuss how this integrates into the University's BArch (Hons) Architecture programme; where students are at in the academic journey at the point of taking Sarah's module and how they develop their knowledge and skills once they have completed the module.

She will explore how her pedagogic approach has developed in recent years and the impact this has had on student attainment, outlook and overall confidence. She will also consider how the process of geometrical modelling has developed student understanding of construction activities on site, an appreciation of the RIBA Plan of Works and how collaborative teams work with and rely on information. Sarah will highlight the aspects that typically enhance student development and well as those that students can find more challenging to grasp.

Sarah Davidson is a Professor of Information Management at the University of Nottingham. She is a Fellow of the Royal Institution of Chartered Surveyors (RICS), a buildingSMART certified practitioner and a Fellow of Advance HE. She teaches information management and modelling into the Architecture and Environmental Engineering programmes delivered to postgraduates and undergraduates.

Sarah also works with industry bodies and clients to embed building information management and modelling and the principles of the UK BIM Framework into business as usual. She is active in nima focussing on skills development and is one of the co-editors and authors of UK BIM Framework guidance. She participates in the standards working group as a UK expert and supports European standards projects relating to guidance and competence. She is a technical expert for the UK Accreditation Services. Before joining the University in 2018, Sarah spent nearly 30 years in the construction industry working for both consultant organisations and contracting bodies.

University of Nottingham
UK | CHINA | MALAYSIA

DR DEREK HALES

Interdisciplinary researcher and Fellow

Derek leads the development of Practice Futures in architecture & design, he is an interdisciplinary researcher of artistic research across faculties of Science Engineering and Environments, and Arts Media and Creative Technologies. Derek is a transdisciplinary research Fellow of the New Centre for Research and practice where he has developed workshops on XR and Reflexive Architecture where his work most fully expresses a speculative philosophical, pataphysical and (left) accelerationist hyper-position. He is currently a co-investigator to the Immersive Technologies Innovation programme, with responsibility for the architecture strand of the research programme in hybrid spatial design. His seminars, workshops & labs explore opportunities for architects and artists in web3, XR, machine learning and GenAI in architecture, technoecological systems and their mirror worlds. He is currently contributing to the SCOSA report on AI, and techUk's policy recommendations for Digital Twins. Derek's research is entangled in Innovation Policy as much as it is caught-up in post-continental philosophy- as a policy wonk in creative industries and construction policy, his research is embedded in the international standards of media infrastructure and space, XR & law, Intellectual Property, Emerging Technologies Horizon Scanning, Planning and the NewSpace (Astro politics), biodiversity and the Environment (planetary politics). Derek is an experienced R&D director, working (+25 years) in abstract culture and knowledge exchange within innovation clusters in Creative Cities (EU Urban Pilot Programme, Huddersfield), Global Media Cities (Singapore, Los Angeles, Manchester), international hackerspaces (London, Hebden Bridge, Taipei and Hong Kong).

Media Infrastructure Spaces

Led by Innovate UK on behalf of UK Research and Innovation, the Innovation Accelerators is a programme of transformative R&D projects geared to accelerate the growth of high-potential innovation clusters - amongst these is Mediacity, Salford. Mediacity Immersive Technologies Innovation Hub is part of the Greater Manchester Combined Innovation Accelerator and was established to explore "immersive technologies in the entertainment, education, health, built environment, and manufacturing sectors, helping businesses to design, develop and test new solutions for the metaverse." Whilst the term 'metaverse' has become somewhat lost in hype - the adoption of spatial computing, web3 and the digital twin remain very much a part of the future of media and are showcased at BIM in Leicester in this presentation on our prototype for cyber-urban interoperability between BIM structured digital urban twins and the industrial Internet of Things - and urban DAO mirror worlds of cyberspaces and metaverses - spatialised pocket-park-universes of web3 tokens, assets, sensor-actuator systems of objects, AI agents and avatars. The talk will illustrate the concepts but will focus on the infrastructures underpinning the cyber-urban vision.

University of Salford MANCHESTER

SEB ISON-JACQUES

Academic and researcher

Setting an agenda for suicide prevention within the construction sector through the use of BIM

My research career began while I was studying for my honours project for my undergraduate degree. It was brought to my attention the disproportionate rates being recorded against the construction sector. My research contextualises mental health (specifically, suicide) within the construction sector before focusing specifically on subject matter experts' opinions on the topic and new insight into current provisions. My findings illustrate that while suicide within the construction sector has received increasing scrutiny and attention, there also exists a notable lack of connectivity among research conducted inside of the UK construction sector. This novel research further highlighted the absence of a clear agenda for suicide prevention within the construction sector and in so doing, underscores the urgent need for a more prominent collaborative and global community of practice to optimise future mental health provisions within the sector. Our sectors traditional methods have been poor in handing project data and information sharing methods. While it is my current belief that technology has no place in the cure of mental health in the construction, my future reason will be focusing on if the improvements of data and information sharing via the use of BIM protocol could assist the prevention of suicide rates in the sector. The next step for my research is to begin collating datasets crossing comparing other sector inside of the UK to target the route cause and begin to understand why the sector although appears to be acting in a safe manor, produces such disproportionate rates when it comes to suicide and the care of its workforce. Other sectors have been willing to accept technology into their daily functionality increasing productivity but furthermore, has their acceptance improved the working environment reducing the rates of workplace suicide and poor mental health.

My name is Seb Ison-Jacques and my day-to-day role is in the digital construction sector, where I replicate physical assets into digital datasets at Parametrix Ltd in Birmingham. I have spent the entirety of my working life in different areas of the construction sector from supply chain management to led quantity surveyor on major construction developments. I am fascinated with all aspects of the construction sector from the physical assets of buildings to the people that create them. Mental health and construction have played a key role in my adult life as both my parents had successful careers in both sectors. It was during my studies for my honours research project at university where I discovered the discorporate rates of suicide in the sector and it became much greater than just a research project. Since then, I have started expanding my research to find the core issues around why the sector is out of proportion to different sector in the UK. My honour project has been published but my most recent research has been centred around cross comparing the four major sectors in the UK including healthcare, construction, financial and education to find out why there should be such disparity in recorded suicide rates which are affecting the long-term working conditions inside of the sector. Along with this, I am beginning to speak at public events to share my ideas and the results of my research to improve the mental health of all my sector colleagues and one day, I hope to alter the current legislation on workplace suicide.

PARAMETRIX

DARA BURKE B.Arch MRIAI

Architect and Lecturer

Dara Burke is an Architect lecturing since 2017, first at TU Dublin and currently at ATU Sligo in Ireland. He was previously Head of Department for the Yeats Academy of Art, Design and Architecture at ATU.

As a practicing Architect with 20 years experience he draws on his knowledge of the design and delivery of complex real world projects and seeks to apply that in his teaching.

He is currently researching how digital tools like Revit / Rhino / Twinmotion and embodied carbon analysis tools can be integrated into the design studio in education and practice. He is passionate about digital tools and digital fabrication and is driven to help students become proficient with the tools they need to contribute to a design team in architectural practice.

Ollscoil Teicneolaíochta an Atlantaigh

Atlantic Technological University

The Digital Studio

This talk will outline how the Architecture programme at ATU has been experimenting with integrating digital tools directly into the design studio in an educational setting.

Over the last number of years various approaches have been taken in the Architecture programme at ATU to see how best to manage the simultaneous teaching of design alongside practical digital skills. We will explore the opportunities and challenges of integrated vs isolated software teaching, the stages at which the tools can be incorporated and the issues around digital transformation in an academic setting.

The current approach is to tightly integrate the analog and digital process in a way that maintains iteration and breaks though inertia. At ATU, the teaching of digital tools in studio is based on the mantra of "sketch – scan – model" a continuous cycle of iteration, where students are required to maintain the readiness to hand of analog techniques alongside the powerful capabilities offered by advanced software modelling and digital fabrication.

Alongside thinking through drawing, the process emphasises a live process that allows students to think through drawing, modelling and simulation, while continuously exercising the critical thinking required to develop an architectural project.

DANIEL CHESSON

Bim Manager

The BIM Olympics! Lyon 2024, Shanghai 2026, Aichi 2028.

Competition has always been a powerful motivator, whether on the sports field or in professional development. In my talk, I'll explore how rivalry can drive excellence, using the concept of Competition-Based Training (CBT) as a catalyst for growth and learning.

I'll begin with a quick introduction to my journey and dive into the parallels between competition in sport and skill-based challenges in education. From there, I'll introduce WorldSkills, a charity that brings together young professionals worldwide, hosting events that are often dubbed the "Skills Olympics."

Sharing my personal experience in the WorldSkills Digital Construction competition, I'll highlight the value of rivalry in pushing both individuals and teams to their limits. I'll discuss how training for these competitions not only enhances technical skills but also cultivates resilience, teamwork, and adaptability.

Through stories of personal and squad outcomes, including the lessons learned from defeat, I aim to inspire educators and students alike to adopt Competition-Based Learning. It's a transformative approach that is changing lives globally, equipping students and apprentices with tools to succeed in their fields.

Daniel is a BIM Manager based in Bond Bryan's London Studio, supporting teams across the wider Bond Bryan network. He started his career as an Apprentice and after a number of years in the industry, he now leads the BIM team to provide a range of support to all Bond Bryan employees. Daniel specialises in information Management and Interoperability, advocates the use of BuildingSMART and OpenBIM workflows wherever possible. Alongside his employment with Bond Bryan, he has competed in the 2022 WorldSkills UK National Finals, where he won Gold in Digital Construction and was selected for the UK squad. Daniel spent the next two years traveling across the UK and Europe, representing the UK at international skill competitions. Daniel continues to advocate and support WorldSkills as a charity, currently fulfilling the role of 'Specialist Trainer', where he helps train his most recent competitor to a top 6 finish at WorldSkills Lyon (France) 2024. Looking forward, Daniel will continue to assist in the running of the national Digital Construction competition and train the UK squad for Shanghai (China) 2026 & Aichi (Japan) 2028.

BOND BRYAN

JOSH CHRYSTAL

Head of Digital

As Head of Digital it is Josh's responsibility to implement and drive the integration of the latest digital construction principles within maber and across the industry.

Josh leads mabers' digital consultancy team in defining and delivering on clients strategic digital requirements; from ISO19650 BIM Compliance to Mixed Reality visualisation and embedded sustainability toolkits.

Originally joining maber in 2014, Josh has a broad range of industry relevant experience which is reflected in a pragmatic approach to delivering digital services. He has also been active in promoting VR / AR in the construction industry across various events in the UK and looks forward to its wider implementation in the industry.

Maber is a leading AJ100 Architectural practice and BIM Consultancy with offices and projects across the UK.

Midland Metropolitan University Hospital: A digital journey

The Midland Metropolitan University Hospital (MMUH) is a 160,000m2 new build acute hospital in the heart of Smethwick, Birmingham. The hospital will provide healthcare support to over 500,000 users in an area that was previously under provisioned and suffering from higher than average mortality rates.

Delivering such a challenging mega-project required the utilisation of cutting edge technology and collaborative digital processes including automated clash detection, 360 site imagery verification and Spot – the robot dog!

This talk will provide an overview of my personal journey from Architectural Technologist to BIM Manager, leading the digital delivery of a £300m hospital.

DR ANA KARINA SILVERIO

Senior Lecturer in Architecture and Construction Technology and the Co-Programme Leader of the MSc in BIM in Design, Construction, and Operations

Navigating BIM Education: Best Practices and Overcoming Challenges in UK Universities

This presentation explores the integration of Building Information Modelling (BIM) within UK Higher Education, highlighting both its successes and challenges. At the undergraduate level, the discussion will cover the common obstacles of holistic BIM integration, often limited to basic introductions to BIM and software training.

Examples from undergraduate modules will be shared to illustrate this approach. In postgraduate education, innovations and best practices will be presented using the MSc BIM programme at UWE Bristol as a case study, co-led by Ana Karina Silverio.

The MSc programme stands out with its multi-disciplinary approach that mirrors real-life scenarios, emphasizing the practical application of BIM skills through core modules and the opportunity for an industry placement, a crucial module that bridges the gap between academia and industry.

Challenges faced by both educators and students will be discussed, including the AI disruption in academia. Despite these challenges, the talk aims to provide a balanced overview of the current state of BIM education in the UK, celebrating successes and identifying areas where both academia and industry can continue to improve.

Dr. Ana Karina Silverio is a Senior Lecturer in Architecture and Construction Technology and the Co-Programme Leader of the MSc in BIM in Design, Construction, and Operations at UWE Bristol. She holds a BSc in Architecture from the Dominican Republic, an MSc in BIM, and a PhD in BIM Implementation. Dr. Silverio began her career in architectural design and urban planning, and she is now primarily focused on teaching and research. Her expertise encompasses BIM implementation strategies, BIM education, and the application of BIM in developing countries. Additionally, her research interests extend to digital innovation, particularly in digital twins and the integration of Modern Methods of Construction (MMC) with BIM and related technologies. Currently, Dr. Silverio is a co-investigator on the research project "Immersive BIM-enabled VR Environments to Simulate Disaster Scenarios in Urban Areas (VRisk)" and the principal investigator on the project "Let's Design More Sustainably! A Novel Approach to Automated Life Cycle Design for Prefabricated Buildings."

UNIVERSITY OF WEST LONDON
The Career University

ALBERTO FERNANDEZ

Architect, Educator and Researcher

Alberto Fernández González is an architect, educator and researcher from the University of Chile and The Bartlett.

His awards include UIA Venice Biennale Celeb Cities 3, Archiprix International, Architizer Future of Shade and Holcim Award Next Generation.

Recognised as the Best Young Chilean Architect in 2009, he is currently a lecturer (Teaching), PhD candidate at UCL, and an advisory board member of the journal Perspectives.

His research is funded by ANID, UCL and UCH, exploring the application of Cellular Automata in architecture. He is a SIGraDi board member as Director of Education.

Also, he co-founded DigitalFUTURES Spanish and Rational Energy Architects, studying the intersection of AI, solar energy, VR participatory design and self-generated spaces.

Interrogating Diffusion Models for Adaptive Architectural Design

This paper examines the integration of Cellular Automata (CA) and Artificial Intelligence (AI), focusing on Diffusion models to create adaptive architectural designs. CA's rule-based systems generate dynamic spatial patterns, which train AI models to predict architectural solutions.

The workflow includes generating and analyzing CA patterns, training AI models, and applying Diffusion models to transform patterns into architectural geometries. Results are evaluated for spatial integrity, material efficiency, and environmental performance.

By synthesizing computational and architectural concepts, this research demonstrates how AI-driven systems can produce scalable, sustainable, and innovative designs, pushing the boundaries of adaptive, intelligent architectural solutions.

The Bartlett School of Architecture

LUKA STEFANOVIC, ACIAT

Architectural Engineer

Lead the BIM Way with Digital Skillset

Architecture industry is tough. Competition is intense and the job market can sometimes be difficult to crack to land a good and well-paid position.

Digital and BIM skillset can be the difference maker that sets you apart and allows you to position yourself within the company as someone driving the change and setting out the standards for others to follow.

While academic programmes, architecture publications and case studies presented at conferences such as BIM in Leicester rightly focus on the BIM process and its advantages, you might assume that a large percentage of architectural studios across the country use BIM on a daily basis.

We've been talking about BIM being business as usual for a while but that's yet to happen, even though more and more offices make the transition and adopt BIM in their practice for various reasons – project or client requirements, efficiency gains etc. There is little doubt the need is there and because the benefits are clear to most studio directors, the push to move to BIM will continue for the foreseeable future. Coupled with advances in AI, automation, design workflow optimisation and efficiency gains should provide opportunities to those with skills, knowledge and desire to drive the change forward – in both their offices as well as the overall industry.

As Architectural Engineer, Luka has worked on a number of UK office and residential-based projects of varying scales, taking on architectural and technical design across the design and construction stages of projects.

He has also worked internationally on projects ranging from design competition entries, EXPO exhibition design, and interior design. With a longstanding passion for sustainable architecture, Luka has been involved in research projects on energy modelling which resulted in conference presentations, webinars, university projects, and participation in buildingSMART's International Expert Panel for Information Delivery Manual (IDM) Development for Building Energy Modelling (BEM).

His interest in embodied carbon has led him to create a calculator for the assessment of carbon emissions directly from a BIM model. As a senior architecture industry specialist at Vectorworks, Luka is responsible for all architectural matters. He has frequent meetings with practices, consulting or providing CPDs, optimising workflows for users, and providing feedback to the software development team.

VECTORWORKS®

DALE SINCLAIR

Head of Innovation

Described as a pragmatic futurist, Dale is driven to transform project delivery through innovative use of digital technologies and offsite manufacturing.

By integrating artificial intelligence into interdisciplinary workflows, he aims to revolutionise the approach to design complexity and future challenges including net zero. His global team is actively engaged in delivering cutting-edge projects, collaborating with clients and contractors to harness the advantages of progressive manufacturing methods including kits of part approaches.

Dale is a qualified architect with over 35 years of experience and has played a key role in shaping industry standards. He was the lead author of the RIBA Plan of Work 2013 publications.

Recently, he contributed to the field with the publication of the RIBA Plan of Work 2020 Overview and the Security Overlay and contributed to the 2nd Edition of the DfMA Overlay. He has also authored multiple books emphasising design management and the crucial role of the lead designer in the digital age.

Dale is involved in many forums, helping stimulate and drive change in the built environment industry and he regularly talks at round table events and gives keynote addresses. He is chair of the UK Construction Industry Council (CIC) Digital Forum, chairs the CB/1 committee for the British Standards Institute (BSI), and is an adviser on the Bridge AI steering committee.

WSP's kit of parts approach point towards the future of construction where buildings are delivered faster, greener, better, safer and cheaper.

Buildings have been constructed for hundreds of years with the methodology honed over the years including introducing many systems at the end of the nineteenth century and the transformation of procurement at the end of the twentieth.

Today, we are close to a paradigm shift as digital, including AI, the shift from project to programme approaches and the transition towards industrialised construction transform how we design and make buildings to radically reduce the carbon footprint of out designs. This talk considers these points and how WSP's kit of parts approach point towards the future of construction where buildings are delivered faster, greener, better, safer and cheaper.

JHARNA SHUKLA

BIM Manager

Information Management Using BIM at mace

The talk will present the role of the information manager in construction and consultancy.

You will learn which are the main challenges on the use of the Common Data Environment (CDE) for design review process.

You will see how Mace is successfully implementing information management using BIM for the Department for Education framework.

With over 15 years of experience in Information Management, Jharna currently working as a BIM Manager with the Mace Consult Digital Engineering team. Her role primarily involves acting as a BIM technical advisor for the appointing party, such as the Department for Education (DfE) working in close collaboration with the project, design, and delivery teams, with responsibilities including monitoring and maintaining the BIM process for DfE projects with ISO 19650 series compliance. Jharna's experience includes working as a lead Information Manager for Mace Construct major projects division on the projects such as 40 Leadenhall Street, Spurs Stadium, HS2, BSKYB Masterplan implementing and overseeing document management processes and providing on-site training and assistance to all project teams. Prior to her role as a BIM Manager with Mace Consult, she also contributed as the Information Manager on a project, with responsibilities including providing strategic guidance, assessing the most suitable common data environment (CDE) solutions that fulfils the organisation's requirements. Jharna acquired MSc in Building Information Management in 2021 from the University of Westminster. Additionally, she authored a paper for the conference proceedings European Conference on Product and Process Modeling (ECPPM) titled "Information Management: Benefits and Challenges of Mobilisation" that she further presented in the conference that was held in Norway in 2022.

DR ASEM AL BUNNI

Architect, BIM and Digital Twin Manager, and Senior Lecturer

Dr Asem Al Bunni is a "German-Registered" Architect, BIM and Digital Twin Manager, and Senior Lecturer in Architecture with extensive experience in both academia and professional practice. Holding a PhD and MSc in Building Information from the UK, as well as a BA and MA in Architecture and History and Theories of Architecture respectively from the University of Damascus, Asem has developed expertise in Building Information Modelling (BIM), Building Simulation, Digital Twins, and Construction Project Management. In academia, Asem currently serves as a Senior Lecturer in Architecture at London South Bank University, where he teaches modules in Design and Professional Practice to BA and March students. In professional practice, Asem works as a BIM/Digital Twin Manager at Winvic Construction, managing construction projects and utilising advanced digital tools such as Revit, Dynamo, and BIM360. With a strong background in managing traditional and BIM projects, he brings a wealth of industry knowledge to his teaching, bridging the gap between theory and practice. A passionate researcher and lifelong learner, Asem has published academic papers, presented at national and international conferences, and built a strong network within the academic and professional communities. With a commitment to innovation, collaboration, and student success, Asem continues to make significant contributions to the fields of architecture, digital construction, and education.

London South Bank University

Agentic AI and BIM: Transformative Cooperation to Revolutionise The AEC Industry

This talk examines how the integration of Agentic Artificial Intelligence (AI) and Building Information Modelling (BIM) is prepared to evolve the Architecture, Engineering, and Construction (AEC) industry. By exploiting AI's capabilities for advanced data analysis and automation, BIM is advancing from being a sophisticated, interoperable, and coordinated process to becoming a fully intelligent ecosystem. This evolution highlights the potential to revolutionise workflows, improve decision-making, and enhance project outcomes throughout the building life cycle.

A key focus of AI-driven BIM is the increased interoperability. While traditional workflows repeatedly suffered from fragmented data, AI technologies and algorithms now allow BIM platforms to serve as a unified source of real-time project information. This repository minimises duplications and inconsistencies, allowing smooth communication across all project stakeholders. Notwithstanding, AI enhances BIM's capacity for design efficiency, construction scheduling, and predictive maintenance, resulting in advanced risk mitigation of schedule delays and cost overruns.

Furthermore, the talk explores how adherence to BIM ISO 19650 standards and protocols can be facilitated by AI-based compliance tools. This promotes data quality and consistency while reducing unnecessary administrative work. Simultaneously, arguments will highlight the significance of people-led digitisation while debating that effective AI integration relies on efficient collaboration, workforce upskilling, and robust change management.

Ultimately, the union of Agentic AI and BIM declares a new chapter in digital construction. By embracing cutting-edge AI technologies, the AEC industry can reach an exceptional degree of robustness, sustainability, and efficiency, resulting in restructuring the built environment and the workforce who manages its life cycle

ANDREAS GALATOULAS

Data, Analytics, and AI leader

AI Shenanigans: Wow the Board, Wing the Rest

How to get the buying in from your Exec Team while delivering value. Presenting some key principles and case studies on data analytics & AI.

Andreas is an award winning seasoned Data, Analytics, and AI leader with a proven track record of building successful analytics functions from scratch, delivering exceptional retention and ROI.

His expertise spans across industries such as energy, insurance, civil infrastructure and environmental infrastructure, publication, healthcare, and loyalty management, where he has facilitated transitions to data-driven models and built successful analytics functions.

As a qualified data leader and with publications on national newspapers for his work, he brings a unique perspective to the table, driving strategic advisory both on crafting effective data and AI strategies and on data ethics and auditing AI models. With a passion for uncovering insights, he thrives on leveraging data to propel business success.

AECOM

DR MELANIE ROBINSON

Associate and Strategy Lead and Women In BIM Regional Lead

Melanie specialises in digital information management and leads Okana's Strategy and Intelligence service.

Driven by the need for cultural change throughout the built environment, she works closely with clients to unlock operational efficiencies within their organisation and achieve transformative outcomes across their estate.

Melanie's interests include change management, standardisation, and digital collaboration, and also acts as Regional Lead for Newcastle-upon-Tyne for Women in BIM.

She also sits on the Special Interest Group for the Golden Thread for the Building Safety Alliance, the BIM4Water steering group, and the Industry Advisory Board for the School of Computing, Engineering & the Built Environment at Edinburgh Napier University, from which she also holds a PhD.

Nurturing a digital culture: Lessons in training and implementation

Whilst we all understand its technological implications, the success of BIM integration in any organisation relies heavily on people-led implementation strategies and a skilled workforce, as well as organisations having the ability to nurture a culture of continuous learning and adaptation. And yet, without training, knowledge sharing, and the demonstration of its benefits, it can be difficult to foster trust and mitigate resistance when approaching systemic adoption across all projects, particularly for complex innovations such as BIM and, as we look ahead, digital twins.

Drawing on her PhD research and global project experiences, Melanie will reflect on how traditional measures of BIM diffusion often overlook the human factors that drive or impede digital transformation. The talk will also explore how deficiencies in these human factors, particularly surrounding competence and attitude, can be overcome through coordinated upskilling efforts that prioritise sustained commitment, clear communication, and organisational buy-in.

Real world-examples of training programmes that have achieved this will be discussed, including:

- The education and training plan that was implemented for Hellas Gold, a copper and gold mining company in Greece, as part of their wider digital information management strategy.
- The training developed for Ashghal Public Works Authority, Qatar, in which we developed and delivered a comprehensive digital transformation roadmap programme to over 1000 public works authority personnel, facilitating the adoption of advanced digital construction practices and ISO 19650 standards.

Melanie will highlight the importance of tailoring training to specific organizational needs, ensuring that the workforce not only understands the tools but also sees their tangible benefits in day-to-day operations.

Okana

MICHAEL HUDSON

Digital strategy consultant

If BIM is the answer, what was the question? _ Exploring digital experience use cases

BIM was promised to be a panacea that would solve all the problems with building design, construction, and most importantly operations and occupation.

However, after many years of sunk cost, clients are increasingly demanding return for their investment in digital construction. Maybe we have simply been asking the wrong question?

Attendees will understand:

- How AI will transform workplace experience and operations
- How major organisations are developing their plans for Gen Alpha employees
- How BIM data is being leveraged to enable smart building use cases
- Strategies that they might want to employ to lead the conversation with clients

Michael is a digital strategy consultant for CBRE, which is the world's largest real estate company.

He originally trained as an architect and has been a design tutor at several universities. About 5 years ago he decided to put down his Rotring pen to focus on leading digital transformation on major built environment projects.

He has had key advisory roles for clients ranging from the Houses of Parliament to Heathrow Airport.

His most recent project has been the global digital building strategy for the company responsible for world's best known search engine.

CBRE

HUA ZHONG

Associate Professor

Hua Zhong is an experienced academic and researcher with a wide range of expertise in building services engineering. She currently holds several prestigious positions, including: Associate Professor at London South Bank University (LSBU), Honorary Fellow at University College London (UCL), Visiting Fellow at Nottingham Trent University and Loughborough University. Hua is a Chartered Engineer and a Fellow of the Chartered Institute of Building Services Engineers (FCIBSE), where she serves on the Academic Panel. She is also the CIBSE Regional Deputy Chair for the East Midlands region, responsible for leading initiatives related to young engineer training and sustainable development knowledge transfer. Hua's research interests span several cutting-edge areas, including building environment systems engineering, digital and smart construction, lean management, and sustainable technologies. She has successfully secured funding from various sources, such as the UKRI Natural Environment Research Council (NERC), the Engineering and Physical Sciences Research Council (EPSRC), and the British Council.

Advancements in Building Information Modelling: Integrating AI, Blockchain, and Sustainability

This presentation delves into the latest developments in Building Information Modelling (BIM), emphasizing its integration with emerging technologies such as Artificial Intelligence (AI) and blockchain.

It also highlights BIM's pivotal role in promoting sustainability within the construction industry. Key discussions will include: AI Integration: Exploring how AI enhances BIM capabilities, leading to more efficient design and construction processes. Blockchain Synergy: Examining the fusion of blockchain technology with BIM to improve data security, transparency, and collaboration among stakeholders.

Sustainability Focus: Discussing methodologies for utilizing BIM in calculating and reducing carbon emissions, thereby fostering environmentally responsible building practices. The session will also review significant research contributions that have advanced BIM applications, providing attendees with a comprehensive understanding of current trends and future directions in the field.

London South Bank University

DR. MOHAMMAD MAYOUF

Associate Professor in Digital Construction

The Data Odyssey: Navigating Digital Construction through data lenses Across the Building Lifecycle

The construction sector is undergoing a significant transformation through the integration of advanced digital technologies such as Building Information Modelling (BIM), Digital Twins, Artificial Intelligence (AI), and advanced data analytics. These technologies have the potential to enhance project management by fostering better decision-making, coordination, and operational efficiency throughout the lifecycle of construction projects. However, their widespread adoption also introduces additional layers of complexity, particularly in the generation, management, and interpretation of diverse data forms. Central to this transformation is the multifaceted nature of data, which manifests in graphical, textual, and numerical forms. Each form presents unique challenges in terms of integration, usability, and decision-making. Graphical data, such as BIM models, enhances spatial visualization but may lack the precision needed for quantitative decisions. Textual data, including documentation and communications, provides valuable context but can suffer from ambiguity and inconsistency. Numerical data, often derived from cost estimation, scheduling systems, and real-time performance tracking, offers precise metrics but risks overwhelming project teams with sheer volume and complexity. The interplay between these data forms requires project managers to adopt sophisticated data management strategies to derive actionable insights without falling prey to fragmentation or data silos. This talk will critically explore the dual role that digital construction technologies play in either amplifying existing complexities or offering solutions to overcome them. By examining real-time decision-making, enhanced risk management, and improved collaboration through these technologies, the keynote will offer insights into how project managers can strategically leverage digital tools. It will also address the significant challenges of data interoperability, the readiness of organisations for digital transformation, and the crucial role of human factors in the effective adoption of these innovations.

Mohammad is an Associate Professor and Academic lead for Digital Built Environment subject at Birmingham City University. He leads the Digital Built Environment portfolio, looking over Construction Management, Quantity Surveying and Building Surveying Programmes both at undergraduate and postgraduate levels. Mohammad's teaching focuses on embedding the use of Building Information Modelling (BIM) applications and digital processes to support construction projects from conception to completion. Currently supervising PhD students, and his research interest focus is upon the complexity of incorporating stakeholders' needs and requirements for buildings, and different information modelling approaches that support incorporating different perspectives. Mohammad's research activities focus on data and information complexity, and proposing inclusive problem solving methods to ensure coherent technological and sociological consideration in the delivery of various aspects within buildings. Mohammad comes from a Civil Engineering background, which was obtained from Eastern Mediterranean University in North Cyprus in 2010. Following his undergraduate degree, Mohammad worked for a year in the industry, and came to England in 2011 to pursue an MSc degree in Project Management at Teesside University. In 2012, he was elected as the best project manager for the North East region of the UK. In 2016, he completed his PhD research in enhancing the delivery of Building Performance through the use of Building Information Modelling (BIM) from Birmingham City University.

BIRMINGHAM CITY University

TAMINA AL HASSAN

Digital Consultant

Tamima is has established a strong foundation in BIM throughout her master's degree in BIM in design, construction, and operations and has become well-equipped to utilise BIM tools and standards for enhanced project delivery.

Tamima has been working in the Real Estate Digital Team at Turner & Townsend on projects supporting clients define their information requirements and delivery team to achieve those requirements ensuring the compliance with ISO 19650.

She has done extensive research on digital twins and smart and is consistently striving to apply innovative solutions and cutting-edge technologies to ensure the seamless delivery of a project.

She is a member of the Women in BIM group and has been a speaker at multiple universities and industry events including the SMART Buildings Show, London Build Expo, Next Gen Hackathon and Digital Construction Week.

BIM in Practice: A BIM-Driven approach for project delivery

The presentation explores the implementation of BIM across the entire project lifecycle. It delves into the various practical use cases of BIM at each project stage, showcasing real-world applications.

The discussion highlights the benefits of adopting BIM, emphasizing its role in improving efficiency, collaboration, and decision-making. Additionally, the presentation illustrates how BIM serves as a foundational pillar for transitioning to digital twins, enabling accurate real time monitoring of data for informed decision-making.

DAVID PHILP

Chartered Construction Manager and Honorary Professor

A digital built environment - state of the nation

The way we plan, build, maintain and use our built infrastructure is being transformed by digital technology, data, and new skills. Increasingly these themes are converging from individual domains into a connected Industry 4.0 model. This is realised through the digital transformation of an advanced construction process, delivering real-time decision making enabled by cyber physical systems. Cyber physical systems embed intelligence and cognitive computing capabilities into the design and simulation process of a physical system.

In this session Dave will be highlighting the findings of the Chartered Institute of Building (CIOB)Artificial Intelligence (AI) Playbook, the components of Industry 4.0 in the built environment, levels of perceived industry capability and practical use cases. He will additionally explore the synergy between BIM, Digital Twins and AI especially the need for quality data coupled with human-centric approaches to hydrate these systems.

With over 30 years in industry David is a Chartered Construction Manager by background. He has previously worked with Balfour Beatty, Mace and AECOM. As CVO at Cohesive he is responsible for driving customer-centricity and creating sustainable value for clients across their asset lifecycle and portfolios.

David has been involved in delivering innovative projects, digital change strategies and digital asset management strategies across the globe from UK, Hong-Kong, Singapore, Australia and the Baltics.

He was seconded in the UK Cabinet Office in 2011 as Head of BIM Implementation and has been a key contributor to the UK public sector BIM mandate (GCS 2011-2016) he was also Chair of the Scottish BIM Delivery Group through the Scottish Futures Trust delivering the BIM requirements of the Scottish Government.

He is chair of the CIOB Innovation Panel and CIOB AI report. Additionally he is an Honorary Professor at Heriot-Watt University, Edinburgh

Cohesive

DANIEL STEPHEN

Researcher

Daniel Stephen is a master' s graduate in BIM finishing with a distinction from the university of Liverpool, he has a bachelor degree in architecture and has a passion for design automation using technology.

His research focuses on how building regulations should be written to leverage automatic compliance checking of building model for faster checks and less human errors. His work aims to create the knowledge and understanding needed to adopt a building regulation format that is written with the goal of supporting more computer aided design compliance checking over the manual compliance checking process.

He currently works in the MEP BIM department for 24/7 group utilizing AI to optimize the project design workflow for facilities management and solving complex design problems on various BIM projects.

He bring a fresh take on how GEN Z leverages AI in their daily design workflow in the professional environment, encouraging others to see AI more as an assistant than competition.

Building Regulations and Automated Compliance Checking.

Proposing a Rule Hierarchy to Inform Decision-Making for ACC of Building Models and automating Compliance Checking (ACC) in Building Information Modelling (BIM).
Addressing slow, manual processes in compliance checks.
Establishing a hierarchy to organize rules in ACC.

A method that accelerates decision-making by arranging rules by importance.

Implementation through IDS standards and object-based approaches.

MARWAN SATTI

Architectural Technologist

Bridging the Gap: Integrating BIM Education Through Real-World

The architecture, engineering, and construction (AEC) industry is changing quickly, with Building Information Modeling (BIM) becoming essential. Yet, many students graduate without proper BIM knowledge, making it hard to adapt to professional workflows. Personally, having experienced this challenge when moving from university to the workplace without a solid foundation in BIM. This talk focuses on closing the gap between university education and industry expectations. The idea is to include BIM as a key part of university courses by using project-based learning. With tools like Autodesk Construction Cloud (ACC), students can work on projects that simulate real-world conditions. They can collaborate with peers from different disciplines, such as architecture, engineering, and construction, taking on roles like those in professional settings. This includes managing tasks, improving communication skills, solving design conflicts, and creating coordinated solutions.
This practical experience helps students develop teamwork, problem-solving, and adaptability, making them ready for the workforce Collaborating with software providers and industry mentors can also give students valuable insights and exposure to professional standards. The talk will outline simple steps to implement this approach, explain its benefits for students and universities, and show how it can transform BIM education. By connecting education with industry practices, we can better the next generation of professionals.

Marwan is an Architectural Technologist at Gensler, working on critical facilities projects globally. With over three years of experience, he is developing his skills in managing architectural packages, coordinating with consultants, and solving technical challenges using tools like Revit, Navisworks, and Autodesk Construction Cloud (ACC).

After earning a bachelor's degree in Architectural Technology from De Montfort University, Marwan began his career at Howells, focusing on residential projects.

Now at Gensler, he continues to grow his expertise while delivering high-quality architectural solutions. Marwan regularly returns to De Montfort University to speak to students, offering guidance, answering their questions, and inspiring the next generation of architectural technologists as an alumnus.

Fluent in Italian, English, and Arabic, Marwan's multilingual skills enhance collaboration within Gensler's diverse team and help address the needs of a global clientele.

Gensler

PROFESSOR DES FAGAN

Head of Architecture

Head of Architecture at Lancaster, my field of research interest is in Optimisation and Deep Learning (Artificial Intelligence) for Decision Support Systems in design. I am particularly interested in the impact that Machine Learning will have on design processes and the regulatory and policy implications for the RIBA and ARB. My roles in the field of AI and Architecture include member of the Expert Advisory Group on Data and AI in Practice (RIBA), and Lead of the Working Group on AI in Architectural Education (SCOSA) where I lead a network of industry partners including AutoDesk, Google and OpenAI, to guide the future integration of AI across UK practices and teaching across all 65 Schools of Architecture. Prior to working in academia, I worked on several international award-winning projects, including as Project Architect for the London Olympic Village 2012 and for Glasgow Transport Museum at Zaha Hadid Architects, winner of European Museum of the Year 2013. I am currently working on a UKRI funded project: AILab: Artificial Intelligence in Low Carbon Building with Eden Project and Grimshaw Architects, to realise the advantages of Machine Learning for low carbon construction of Eden Morecambe

AI:Lab [Artificial Intelligence for Low Carbon Building] _ A Case Study on the Integration of AI into Building Design Workflows

The AI:Lab – Artificial Intelligence for Low Carbon Building (Des Fagan – Principal Investigator), a funded research project incorporating computer scientists, engineers and architects concluded in early 2025, after a year of research and consultation activities on the potential of integrating AI workflows into the design process, specifically BIM software.

The Ai:Lab asked: how can processes of Artificial Intelligence (AI) target the reduction of carbon expenditure in the design and construction of buildings, and what role do architects, engineers, our students, and the public have in the process of de-carbonisation using new tools of AI integrated with the design process? Working with Grimshaw Architects, and with a focus on the new Eden Project in Morecambe Bay, our key objective was to establish the Ai:Lab as a vehicle to recognise the cross-disciplinary demands and opportunities of AI integrated with BIM, to capture these at an early stage, and produce impactful research in communities and across the construction sector.

The Lab ran during 2024, concluding with a symposium and exhibition on the use of AI in designing low carbon buildings. Four key areas of focus were established:

1. LLM Workflow Integration with BIM for the Zero Carbon Standard
2. Local Knowledge LLM Workflow Integration
3. 3D Shape Generation Using Parsed Image Data
4. Structural Shell Deflection Maps Generated with Linear Regression Models.

This talk will explore the impact of the Ai:Lab, evaluating its outcomes, exploring responses from construction professionals, students, and the public to the prospect of an AI-augmented low carbon-first environment.

Lancaster University

VICTORIA FARROW

Associate Professor and Subject Head in Architecture and Built Environment

The Bim In Series

BIM in Leicester is an international student led conference, which has a global standing and a reputation as a large scale and is a live learning project for undergraduate and postgraduate students. The conference has been hosted at a number of different institutions, using the vehicle of BIM (Building Information Modelling) as the topic for discussion and analysis. The initiative is unique in nature and is pioneered by the author, alongside a team of students and graduates. The conference provides teaching and opportunities to students who participate through the exposure to high responsibility tasks that hold both financial and reputational weight. This conference looks to analyse and evaluate the importance of "responsibility" in building an entrepreneurial approach to learning with regard to building skills in advance of industry.

The conferences, both as a live project and also as an event, does not have an equivalent and no similar example exists within the UK or within Europe or any other country to the knowledge of the author. As a tool for collaboration, it sets up a fascinating landscape for team working and explores new pedagogical approaches to teach skills that sit outside the regular architecture and design curriculum. The conference has achieved international standing and boasts a network that extends beyond the UK to Chile, USA, Dubai, Malaysia, Copenhagen, Finland, China, Sweden, France, USA Spain and a number of other countries. As a tool for expanding networks and engaging with practice and knowledge worldwide, the conferences provide pathways into uncharted territories that are not accessible in the classroom. As part of Victoria's research, she is documenting and mapping how the live learning project begins to knit together known gaps between education and the profession, touching upon new and exciting ways for bridging these. For architectural practices, software providers, researchers and industry specialists to showcase current projects and developing research, hosting some of the most famous practices in the world, which provides a window into the "behind the scenes" and into real world examples for students. groups of students. Many students have commended the event, explaining they have both made friendships but also learned the ability to network and interact with the professional world, leading to securing employment with some of the presenting and attending practices at the conference.

Victoria is an associate professor, subject lead in architecture and the built environment at the Leicester School of Architecture, DMU, educator, designer and practising architect with experience across multiple sectors of the built environment.

In practice, Victoria has worked within the fields of architecture, planning, facilities management, building information modelling (BIM), occupancy planning, architectural visualisation and interior design.

As an educator, Victoria has always been passionate about architectural education and throughout her academic career, she has developed connections with individuals and institutions across the UK as well as in the USA and South Africa, which have provided her with the opportunity to teach internationally and also collaborate on numerous projects and research activities.

DE MONTFORT UNIVERSITY LEICESTER

DR. CORNELIA MARIA TUGLUI

Senior architect

After finishing her Architecture degree followed by her PHD in Bucharest (Romania) and four years leaving and working in Denmark, Cornelia moved to the UK in the Oxfordshire area. Before joining Airc she worked for 13 years in the construction sector, mainly on residential projects. During this time she tried to keep her creativity alive by being involved in several architectural competitions and artistic projects (art exhibitions, children books illustration, etc).

Wanting to challenge the recurrent energy crisis that humanity faces, Cornelia certified as a Passive House designer in 2023. She now advocates for the incorporation of energy efficiency and sustainability principles in all projects at Airc and beyond.

JAIME INGRAM SOLIS

Architect

After graduating as an architect in Spain, Jaime worked in Panama before moving to the UK to develop his architectural career as an early user of BIM and digital tools to improve the delivery of the build environment. Architect specialised in bioclimatic design and energy efficiency through building information and energy modelling, he is an experienced BIM Lead working on innovative ways to coordinate the different consultants' information models, developing clash detection and rule checks systems to deliver fully compliant designs in line with ISO19650.

OpenBIM between practice and teaching

The talk we are proposing is a short description of how we developed and embedded step-by-step the OpenBIM into the DNA of our practice and how this drives us to explore new territories including creating our own academy. OPEN BIM is about people – not the technology nor the interoperability, but the collaboration between people.

If you have the right mindset, you know that everyone is aiming for the same outcome – a successful project. But of course, taking others with you on the OPEN BIM journey might mean you have to teach others in the project team, even those who work for another company.

So far, our experience with OPEN BIM made us realise that there is a need for teaching and spreading out everything related to BIM. In 2024, we put together our first 6 module program, where students understand and learn how you can efficiently operate, manage and produce the required information from the same BIM model, no matter if we are talking about elevations, the envelope's U-values, quantities, window schedules etc.

In the end, this talk is about creating an open discussion for the participants about their challenges in learning and applying OPEN BIM in their work.

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BIM SERIES

SPECIAL GUESTS

MARK LINETON

BIM Development Manager

Mark Lineton is the BIM Development Manager at Foster + Partners. After graduating from Nottingham Trent Universities Architectural Technology course in 2017,

Mark re-joined Foster + Partners having previously worked as an intern in the practice. His experience is firmly rooted in project delivery, including the utilisation of BIM.

He is now responsible for the inception, creation, and delivery of key strategic directives for the practices BIM aspirations.

PHILIP SHILTON

Senior Lecturer

Philip Shilton is a Senior Lecturer at Nottingham Trent University, where he leads and delivers modules at both BSc and MSc levels. As the leader of the department's Digital Technology strategy, he plays a pivotal role in implementing and advancing BIM/IM practices within academia. In addition to his academic responsibilities, Philip works as a Digital Innovation Champion at HLM Architects, where he drives digital innovation initiatives.

Leveraging his expertise in BIM/IM management, 4D simulation, Kits of Parts, DfMA, and project coordination, he ensures the delivery of optimised and forward-thinking project outcomes. Balancing these two roles, Philip bridges the gap between industry practice and academia, mentoring the next generation of professionals while applying cutting-edge research in real-world contexts. Philip's career includes notable positions such as Modular Digital Lead at AECOM and Associate within the Digital Innovation Team at WSP. In these roles, he successfully integrated advanced digital technologies, delivering efficient, cost-effective solutions across a range of sectors, from residential and healthcare to modular construction. His ability to combine technical expertise with leadership has consistently contributed to project excellence and innovation

A blueprint for success - The importance of academic and employer partnerships

Understanding how your workforce feels about transitions prior to the introduction of digital technology is key to ensuring smoother adoption processes. In this research project, we applied an empathy-led approach to digitalisation, helping organisations create supportive environments that empower employees as technology reshapes their roles.

The research project, Empathy-Led Self-Assessment Tool: Unlocking Digital Workforce Readiness, funded by InterAct (ESRC), highlights the impact of emotional dynamics on digital technology adoption. Our findings demonstrate that understanding emotional readiness is crucial for successful digitalisation. Organisations that acknowledge and empathise with the emotional concerns of their workforce are more likely to foster a positive organisational culture conducive to innovation.

The aim of the project is to identify and understand the emotions that affect readiness to adopt new technologies before their introduction. In this presentation, we explore how emotions influence individuals' decisions to adopt technology. We will also provide a sneak peek at the self-assessment toolkit designed to help individuals and managers assess readiness levels early, enabling organisations to implement support mechanisms that empower their workforce.

This presentation includes a call to action for architecture and construction firms attending the BIM in Series event on 5th February 2025, encouraging them to adopt empathy-led strategies for digital adoption. The conference will seek pledges from industry participants to prioritise understanding individual readiness attitudes for digital adoption.

Foster + Partners

NTU Nottingham Trent University

MARZIA BOLPAGNI

Head of BIM International

Marzia is Expert at the European Committee for Standardisation (CEN) TC 442 and International Standardisation Organization on BIM ISO/TC 59/SC 13 where she chairs a Work Group on information requirements standardisation (Level of Information Need), an evolution from the concept of "LOD". She is lead author of the Level of Information Need standard ISO 7817-1 (ex EN 17412-1). She works as Head of BIM International at Mace where she develops and implements digital construction solutions for public and private international clients in five international hubs. She holds a PhD in ICT and Smart Construction and she is passionate in filling the gap between industry and academia. She is glad to be a member of the BIMExcellence Initiative, Assistant Editor of the BIM Dictionary where she coordinates more than 150 volunteers worldwide, Ambassador of Nima. She is also PastChair of EC3 Modelling and Standards Committee, Honorary Assistant Professor at UCL The Bartlett School of Sustainable Construction and Visiting Professor at Northumbria University. She is founder of Italians in Digital Transformation Uk, she loves sharing her knowledge with students and she is often invited as keynote speaker at academic and industrial events, she is TEDx Speaker and co-editor of a book on Industry4.0 for the Built Environment. She received 30+ awards for her activities including Young Engineer of the Year by the Royal Academy of Engineering, Emerging Professional of the Year, Woman of the Future in 2021, InspiringFifty Uk 2021 and Europe 2022, EC3 2023 Scherer Award and 2023 Design and Build UK Rising Star.

When the Information Manager meets

How Artificial Intelligence (AI) is changing our sector? AI is contributing to what is defined as Industry 4.0, the 4th industrial revolution.

We cannot ignore it. However, we currently see professional approaching the topic in different ways: from scepticism, to limited interest to enthusiasm.

When dealing with Information Management using Building Information Modelling, new opportunities arise. AI, especially Machine Learning (ML) have the potential to automate processes, reduce errors and delivery time.

The Information Managers are falling in love with AI as they see it as a natural evolution of their profession.

But which are the risks associated with its use? Can AI damage our reputation and put us on risk of losing our jobs?

This presentation will present the current potentials with real demos and it will discuss associated risks that all professionals should be aware of.

Are you already in love with AI? Join this session to discover how AI will empower you without hurting your career progression.

JASON TAYLOR

SFHEA, FRSA, AEI, PGCE-HE, MSc Lead for Architectural Digital Design, AI & DELTA

Senior Lecturer and Architectural Digital Design (ADD) Lead

Age of AI: A New Paradigm for Architectural Digital Literacy

The advent of artificial intelligence (AI) is reshaping the field of architecture, ushering in a new era of digital literacy. This talk explores the evolving intersection of AI, BIM and architectural education, highlighting key developments and challenges. The session begins with a discussion on Digital Literacy in Architectural Education, examining the current state of play in integrating AI tools into curricula and the growing need for architects to be proficient in these emerging technologies. We then jump into Ethical AI, outlining principles such as transparency, accountability, fairness, and the safeguarding of privacy, which are critical for guiding AI's responsible use in architectural practice. Next, we explore Academic Guidance strategies for ensuring students engage with AI tools ethically, balancing innovation with design cognition.

Through Case Studies, we showcase student projects that employ cutting-edge AI tools like Sketch to Image and Text to Image generators, demonstrating how these technologies influence the creative process and design evolution. AI in BIM & Construction highlights the transformative potential of AI for large-scale data management and automation in building information modeling (BIM), fabrication, and mechanical, electrical, and plumbing (MEP) systems.

The talk then touches on Emerging AI & Tool Development, providing insight into the latest AI advancements in architecture, and how they expand the possibilities for design and construction. Finally, we present a Roadmap for Emerging Architectural Digital Literacy, offering a framework for future architectural education that incorporates AI in core areas such as technical drawing, 3D modelling, visualization, fabrication, and sustainable design. This roadmap will serve as a guide to ensure future architects are well-equipped to navigate the digital future of their profession. By exploring these facets, this talk provides a comprehensive overview of AI's role in shaping architectural practice and education in the 21st century.

Jason Taylor is a Senior Lecturer and Architectural Digital Design (ADD) Lead at Manchester School of Architecture (MSA), where he oversees the school's digital strategy, including advancements in AI and Digitally Enhanced Learning, Teaching, and Assessment (DELTA). He collaborates globally with architectural practices, researchers, and digital technology leaders like Adobe, Autodesk, and Epic Games to drive knowledge exchange and secure sponsorships.

Jason's research focuses on Ethical AI and its impact on Design Cognition, blending pedagogy, cutting-edge technology, and digital fabrication. As a Senior Fellow of the Higher Education Academy and a Fellow of the Royal Society of Arts, he is committed to tackling digital poverty and mentoring future architects and digital specialists. With expertise spanning over 210 software tools, Jason has worked with renowned practices such as Zaha Hadid Architects and Foster & Partners, and brands like Audi and Nike. His work extends to designing affordable 3D-printed bionic limbs, challenging perceptions of disability through innovation

MANCHESTER SCHOOL OF ARCHITECTURE

ALFONSO MONEDERO

Head of BIM and Senior Associate

Heatherwick studio

Alfonso is an architect leading BIM implementation at the award-winning, London-based multi-discipline Heatherwick Studio.

Having worked as Project Architect and Head of Design in a leading practice in Chile, Alfonso decided to move to a more technical role after observing how technology skills, or the lack of them, influence and limit design creativity and affect project outcome.

With experience working internationally in Spain, India, Chile and UK, Alfonso started collaborating with Heatherwick studio in 2015 as a BIM Consultant, and then moved to Woods Bagot (London) to work as Design Technology Manager.

In 2018 he re-joined Heatherwick Studio to continue BIM implementation. Since then the studio has achieved a digital transformation in the BIM department becoming one of the industry leaders in its sector. His goal is to embed BIM in the design phase without limiting or hindering the design process.

Embracing AI Without Losing Your Identity: A Humanized Approach

Technology is most effective when it serves as a tool you can control, rather than a force that dictates your creative output. If we can't predict or influence its outcomes, we risk becoming spectators in a process we should be leading. With each new technology comes a wave of unbridled excitement, and AI is no exception. As the industry rushes through what Gartner's Hype Cycle terms the "Peak of Inflated Expectations," AI-generated work often lacks the unique signature of its creators, resulting in designs that can be easily traced back to DALL-E, Midjourney, or Stable Diffusion. However, the key to harnessing AI's true potential lies in understanding and controlling the technology—using it to extend creative boundaries rather than replace them. At the studio, we've approached AI not as a threat to our design identity but as a catalyst for innovation, all while staying true to our ethos of human-centered design. In this presentation, we will share how we've integrated AI across various stages of our design process, demonstrating the seamless fusion of advanced technology and artistic vision. Image Generation: We've developed our own Stable Diffusion model, training it using LoRA (Low-Rank Adaptation) based on our past projects. The result? Renders that are nearly indistinguishable from those created by our in-house team, blending the precision of AI with the nuance of human creativity. Knowledge BOT: By training retrieval-augmented generation (RAG) models on our internal knowledge base and integrating them with Revit, we've transformed how we access and apply information. We're currently expanding this model to include over a decade's worth of published articles and videos, streamlining research and enabling faster decision-making. Drawing OCR: Our team has begun training models on legacy raster drawings, enabling us to automatically identify and label their contents. This system will accelerate the retrieval of archival information, bringing forgotten knowledge into the present more efficiently. Image Recognition: Initially conceived as a metric-based platform, our image recognition tool has evolved into a unique "boring building identifier." It's catching the attention of planners and developers as an invaluable tool in their decision-making process, offering a fresh, AI-driven perspective on urban development. By embracing AI in ways that complement and amplify our core values, we've found new paths to creativity that don't sacrifice our identity but rather strengthen it. In this session, we'll explore how AI can be used not just as a tool, but as a creative ally—one that helps us do more while staying true to the principles that define us.

OLIVER THOMAS

Director of Design Technology

The Future of housing using BIM to Manufacture and Microfactory's to build sustainable homes.

Facit Homes has been quietly transforming the housing industry with its innovative end-to-end approach to homebuilding. Over the past 16 years, the company has developed a unique method for designing and constructing high-quality, sustainable homes by leveraging advanced digital tools like BIM and precision manufacturing. This approach ensures exceptional accuracy, efficiency, and sustainability, setting a new standard in the industry.

Now, with Facit Technologies, we're scaling this proven model to tackle the challenges of multi-unit developments and revolutionize homebuilding at scale. By combining advanced technology like BIM with localized microfactories, we're addressing critical housing challenges, delivering sustainable, high-quality homes faster and more affordably. Facit Technologies isn't just growing a business, we're redefining how homes are built for the future.

Oliver Thomas is a British architect and Co-Founder of FACIT Homes/ Technologies, rethinking the future of housing through digital design and fabrication.

Oliver has worked in various roles as an architect, specializing in design, technology and fabrication for firms such as Aedas, Front and BIG.

Oliver is also the founder of Archi-Tech Network, an online platform that aims to foster collaboration, discussion and education resources around the intersection of Architecture and Technology

FACIT HOMES

DR MERSHA AFTAB PUENTE

Senior Lecturer in Design Management, Associate Director of External Funding, Birmingham School of Architecture and Design, SEDA Recognised Supervisor

Dr. Mersha Aftab has expert knowledge in using empathy as a method to extract 'what' a person is thinking (implicit knowledge) and doing (tacit skills) and generating a representative perspective on what is going on inside peoples' minds (Mersha & Robert, 2016). She also leads the international Design-led Transformation Network, which brings together the private, public and education sectors to understand the role of empathy in transformation.

DR IRYNA YEVSEYEVA

Associate Professor in Computer Science

DMU Co-investigator, Dr. Iryna Yevseyeva, is an expert in quantitative approaches to decision-making and multicriteria decision-making. Her research on measuring the influence power needed for behavioural change will be of value for measuring and quantifying readiness given collected variables and identified criteria and metrics. She has worked in interdisciplinary large teams, e.g., in the Choice Architecture for Cyber Security (CHAISE), a project part of the Research Institute for Sociotechnical Cyber Security (RISCS) as a leading research associate, collaborating closely with cyber psychologists and ensuring the completion of deliverables.

DR MEY GOH

Reader in Transdisciplinary Digital Manufacturing

The Loughborough University Co-investigator, Dr. Mey Goh, is Reader in Transdisciplinary Digital Manufacturing at the Wolfson School of Mechanical, Electrical and Manufacturing Engineering. Her research interests concern the role of people within future digitalised manufacturing systems. Her work aims to create the knowledge and understanding
Required to enable the adoption and sustained use of industrial digital technologies. She leads Loughborough University's contribution to the Made Smarter Innovation: Centre on PeopleLed Digitalisation. She brings expertise in uncertainty analysis, machine learning, informatics, knowledge management, and access to the Made Smarter Innovation: Centre for People-Led Digitalisation industry network

Empathy-led self-assessment tool: Unlocking Digital Workforce Readiness

Understanding how your workforce feels about transitions prior to the introduction of digital technology is key to ensuring smoother adoption processes. In this research project, we applied an empathy-led approach to digitalisation, helping organisations create supportive environments that empower employees as technology reshapes their roles.

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BIM SERIES

PANEL CHAIRS

JAKE HANCOCK

Architectural Student, Practitioner, Educator

Jake is an architectural student, practitioner and educator who works at the intersection of these roles. His recent experience provides a unique insight into the current software transition required of students by the industry as it shifts towards BIM. Something which has shaped his teaching methodology. With a strong software background his personal work focuses on technical environmental strategies and embodied carbon aiming to create low operational cost structures, a commitment recognised with his win of the Birmingham Architectural Association Green Book Award. He began professional work on large scale sustainable infrastructure projects, using BIM to coordinate complex systems for national scale carbon sequestration, energy and renewable fuel production. Later he joined a smaller practice to focus on design, taking on a role as a software lead, to implement BIM technologies suited to the firms projects. This role marked the start of his teaching career and he now shares his expertise as a software educator at DMU.

RYAN STEED

Design Engineer

Ryan graduated with a BA (Hons) in Architecture from Birmingham City University in 2018. Since graduating Ryan has dipped his toe into private practice, whilst also maintaining close contacts with his previous colleagues at BCU coming back to participate in architectural reviews as well as being part of the original BIM Camp back in 2016 during his studies. After a number of years in a Space Planner role for a large retail company, helping setting up the company's first steps into the BIM sector. He has moved into a Design Engineer role, once again helping with the companies fledgling steps into the BIM world. He is aiming to step into a BIM speciality role in the near future as a result of his close ties with BIM world as a result for his repeated roles within BIM in series.

PANEL CHAIR

BIM SERIES 2025

CHRISTOPHER BICKNELL

Lecturer

Chris brings a view of asset planning driven by common data, which focuses operational thinking at the most appropriate stage of a design to ensure the most effective long term benefits are delivered, or for existing assets, the opportunity to consider ongoing costs of ownership as an estate develops over time. A Chartered Architect and Facilities / Consultant and as a Director in the AECOM Asset Consulting team, Chris has led numerous data driven asset projects where operational alignment in the design of schemes has delivered Whole Life benefit to the final solution. Developing common data structures to link Design Modelling to In Use performance was an integral part of creating the Golden Data Thread / single version of the truth' from inception of a project to its end of life. This role encompassed the development of lifecycle and sustainable strategies and models, both for new bids and existing estates; optimisation of design / asset solutions and the delivery of enhanced whole life performance of the final built asset, all underpinned by verifiable data. A member of the British Standards working group, Chris sits on the authoring group for the updates to BS ISO 15686-5:2017 Buildings and constructed assets. Service life planning and BS ISO BS 8544:2013 – Guide for life cycle costing of maintenance during the in use phases of buildings. Currently leading the MArch Professional Practice module at the Leicester School of Architecture, Chris is bringing his operationally driven design experience to our next generation of Architects.

ANASTASIYA LUBAN

Lecturer

Anastasiya Luban is a Lecturer at the Manchester School of Architecture, ranked 5th in the QS World Rankings. As a key member of the ADD (Architectural Digital Design) team, she contributes to the development and implementation of the school's Digital Strategy, ensuring the constructive alignment and continuous evolution of school's digital infrastructure. Her work aligns with the DELTA (Digitally Enhanced Learning Teaching and Assessment) framework, creating an inclusive, technology-driven learning environment that addresses digital poverty and promotes equitable access to cutting-edge tools and resources. A passionate advocate for inclusive pedagogy, Anastasiya fosters a creative and adaptable learning environment, empowering students to explore diverse methodologies. As Visualization Lead, she specializes in advanced architectural communication and representation, seamlessly integrating analogue and digital techniques to help students develop unique and effective design languages.

PANEL CHAIR

BIM SERIES 2025

DR ALONA MARTINEZ PEREZ

Senior Lecturer and Architect

Dr Alona Martinez Perez is a Senior Lecturer at the Leicester School of Architecture, De Montfort University. Originally from Spain, she trained as an architect in England and Scotland holding qualifications in both architecture and urban design. She has completed her PhD at the University of Sheffield with a scholarship award on the subject of "The Architecture of the Periphery" looking at the theory of the periphery in the European city, with a case study in Madrid. She won the PhD Conference bid for AHRA (Architecture and Humanities Research Association) at Plymouth University and has presented over 20 papers and conferences on peripheral issues Dr Martinez Perez also worked in practice for nearly a decade in both England and Scotland for a number of public and private sector clients and companies on a number of prestigious project ranging from 100K to 40 million pounds in retail, hospitals, schools, hotels and master planning and continues to work as an architect in small projects. She is a Fellow of the Higher Education Academy in the UK, and holds a Postgraduate Diploma in Architecture and Urban Design, and a Master of Science in Urban Design from Edinburgh College of Art, and a degree of Architecture from Huddersfield University.

EMRE SÜNER

Architectural Designer

Emre Süner is a Turkish architectural designer exploring fun ways to transform the built environment he experiences into bespoke spaces and pieces where aesthetics and functionality merge to tell his stories. Having worked at the FIFA World Cup 2022 in Qatar for several exhibitions and recently designing window displays for Hermes Hermès, Süner is, in his essence, an innovative storyteller who believes every material has a purpose that can transcend their original intent. He has a meticulous approach to sustainable practices and specializes in hand-crafting sculptural furniture and installations from recycled materials. He turns discarded everyday elements such as PVC pipes and rusty metal rods into quintessential design pieces that challenge conventional aesthetics and defines his own visual identity. Growing up Emre took pleasure in drawing every day- collecting one quality colored pencil at a time from his weekly allowances, to eventually creating life-like portraits of his artistic muses. Following his father's suggestion to transform his drawing skills into shaping the world by studying architecture, he completed a degree in Architecture & Design with a First Class Honors from Birmingham City University, UK, and received a Drawing Award from Royal Institute of British Architects for his thesis.

VINESH POMAL

Senior Lecturer and Architect

Vinesh Pomal is a Senior Lecturer in Architecture and Architect at Leicester School of Architecture where he co-leads BA2 and runs a design studio focussing on creating civic spaces and delivers Professional Practice lectures in BA1, BA2 and BA3. He joined the school on a full-time basis in October 2023 from practice having taught and eventually co-leading BA1 since 2015 on a part time basis. He has worked as an Architect at various practice sizes including ButcherBayley Architects, ECD Architects, Levitt Bernstein, TateHindle. tpbennett and TfL where he gained experience in designing sustainable communities and championed the use of BIM in his projects. He undertook his full architectural training at Portsmouth School of Architecture. His professional experience to-date varies from estate regeneration schemes across all tenures through to specialist housing including independent living, extra care, nursing homes and intergenerational living; having worked on numerous schemes across the UK and drawing upon his personal lived experience. Vinesh has also been a guest critic at Ulster, Central St. Martins, Loughborough, Reading and Sheffield universities and has numerous articles published in the architectural press. He sits on the Ealing, Harrow, Sutton and Bexley and Design South East Design Review Panels and co-founder of the Asian Architects Association and is an advocate of equality, diversity and inclusion.

DR JIELING XIAO

Co-director and Reader

Dr Jieling Xiao is a Reader in Architecture and Sensory Environment at Birmingham School of Architecture and Design, Co-director of the Urban Cultures research cluster. Her research on smellscapes and soundscapes explores from a spatial design perspective with a focus on human experiences and wellbeing in everyday living. She is lead editor for Frontiers Research topic on "Smells, wellbeing and the built environment". She is a member of the UKRI Interdisciplinary Assessment College and associate editor for Springer Nature for the journal of the Humanities & Social Sciences Communications.

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MATT BLAKELEY

Regional Director

Matt is the Regional Director for RIBA covering the Central region which includes the East of England, East Midlands and the West Midlands. Matt has been at RIBA since 2022, overseeing activities that promote and develop architecture in the Region and supporting RIBA members in navigate the ever changing landscape around them. Matt has a diverse professional background which includes Banking, Manufacturing, Inward Investment, Professional Services and Sport Administration. He is passionate about sustainability in the built environment, specifically about reduction of carbon emissions through construction and the environmental and societal impacts of buildings.

DR DINGAYO MZYECE

Lecturer and Chartered Construction Manager

Dr Dingayo Mzyece (PhD) is a Chartered Construction Manager (MCIOB), specialising in the discipline of quantity surveying and construction with several years of experience. In his current role, he contributes to the built environment curriculum and teaches on a wide range of modules related to quantity surveying; and construction project and cost management. During the earlier part of his career, Dingayo worked as a registered quantity surveyor (RQS) on several projects and now a keen researcher in various construction related themes such as Building Information Modelling (BIM) uptake and interoperability; and construction health and safety, among others.

DAVE PEACOCK

Head of BIM & IM Services

Dave has 27 years of experience in the construction industry, with 17 years in BIM and digital roles on various projects and organisations. Dave leads the award winning team at Operance providing BIM, Digital and IM services to all parties within the architecture, engineering, construction and operations (AECO) sector, building the relationship with our clients and ensuring customer success. He also leads the delivery team for the Operations (O&M/H&S) and Safety (Building Safety Act/Golden Thread) modules within the Operance platform, a cloud-based solution that enables users to access, update and share building information throughout the lifecycle of a project. Dave has been involved within Nima (formerly UK BIM Alliance) for the past 7 years in a number of roles such as regional chair, upskilling lead, communities and outreach committees along with involvement in the UK BIM Framework ISO19650 guidance committee and previous roles within The Golden Thread Initiative, BIM4Housing, BIM4HA (Housing Associations) and buildingSMART Golden Thread, FM and openBIM committee.

DR JAMILEH MANOOCHEHRI

Associate Professor Academic

I am an educator and an architect. I graduated from Architectural Association School of Architecture, obtained PhD from Development Planning Unit, Bartlett, University College London. In architectural practice for nearly 20 years before entering academia. At Leicester School of Architecture, taught and led design and History, Theory and Criticism Modules in undergraduate and postgraduate levels. Supervising PhD students. Successful completion on the Hermeneutics of the Arab Suq.

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