
SketCHI: Hands-On Special Interest Group on Sketching in HCI

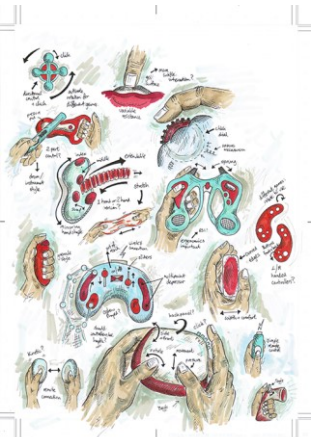


Figure 1: Iterative sketching, Miriam Sturdee

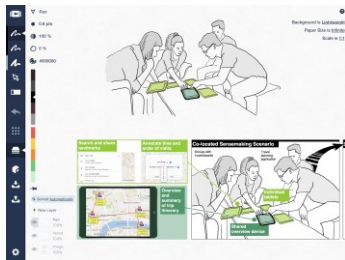


Figure 2: Sketching multi-device use (in Concepts), Nicolai Marquardt [2]

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Abstract

Sketching is of great value as a process, input, output and tool in HCI, but can be confined to individual ideation or note-taking, as few researchers have the confidence to document events, studies and workshops under the public gaze. The recent surge in interest in this sometimes-overlooked skill has manifested itself in courses, workshops and live-scribing of high-profile events – and a renewed enthusiasm for freehand sketching as a formal part of the research process at all levels. *SketCHI* aims to address both research interests and sketching practice in a combined approach to define, discuss and deliver theory and methods to a broad audience. As well as structuring high level discussions and collating information and resources, this SIG will allow attendees to practice and explore observational sketching on location around the conference, with feedback and encouragement from industry professionals. Finally, attendees will be encouraged to collaborate and form a research community around sketching in HCI.

Author Keywords

Sketching, Visual Communication, HCI.

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

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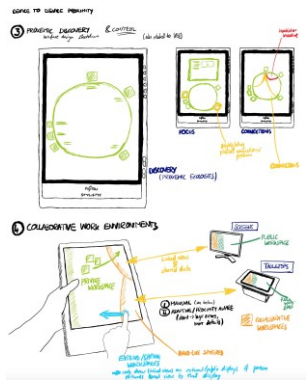


Figure 3: Sketching Cross-device work, Nicolai Marquardt



Figure 4: Sketching used in user interfaces, Thuong Hoang [1]

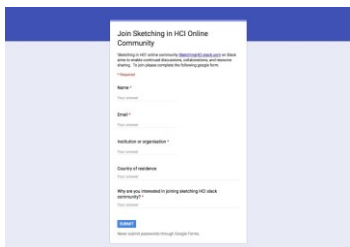


Figure 5: Sketching HCI online community sign up form:
https://goo.gl/forms/vva3hSSqs_wax3QuC2

Introduction

To sketch is as natural to the human as is to speak, and the two develop along similar pathways in the brain [3]. Creative mark-making is not confined to young children however, but there is little support for this skill in formal education until university, and even then, this is usually limited to certain disciplines (art, engineering, architecture) [12]. The advent of digital technology prioritizes word-processing and takes the pen out of our hands, so to doodle whilst thinking may no longer be common practice. Recently there has been a shift toward supporting digital hardware offering advanced opportunities to annotate, color and explore – but this is only one way in which the sketch can be utilized within HCI. Sketching in HCI can be traced back to Sutherland’s interface designs in 1964 [14] but has moved on significantly from stylus-and-surface, design and process, to be embraced in computing to the point where robots can create observational sketches [15]. Upon closer examination, freehand sketching is actually hidden in plain sight within many research projects, whether it is to ideate, document process [5], iterate ideas and prototypes [13] or even be used as a tool in search [4] or data exploration [9] (Fig. 1–4). Although the sketch as input in search, or as a style generated by programming [17] is far from its origins, it still remains as inspiration for a vast body of work and computational advancement. As of yet, there is no formal community or sub-field of sketching in HCI, despite its breadth, so addressing this gap can advance our understanding of how the sketch is integral to our work in HCI, and what it can offer in the future. As a field, we are bringing freehand sketching to the fore by offering courses [11], workshops and tutorials [10] and reference books, guiding the researcher through the entire design process [6]. It is no longer unusual to see

an artist sketchnoting or scribing at high profile events [16], and the results serve as both documentary and summary of the range and scale of HCI research.

This SIG not only aims to bring together researchers who use sketching in practice and education, but to engage those who use the sketch at a computational level, as a grounding practice and collaborative opportunity. These groups have rarely been brought together, but the insights that could be shared between sub-disciplines may advance our understanding of what the sketch has become, and what the future holds for sketching in HCI as its own field. This work will provide opportunities to introduce, reflect, share best practice, form collaborations, and above all experience CHI through the production and sharing of hands-on observational and insightful sketching [7, 8].

Audience

Although, sketching courses have taken place at CHI these have been practice focused, and have not offered in-depth discussion of state-of-the-art and the future of sketching in HCI. *SketCHI* will follow on from the organizers’ accepted CHI 2018 course *Applied Sketching in HCI: Hands-on Course of Sketching Techniques*, where attendees will be guided through selected sketching techniques and strategies to produce tangible outputs. *SketCHI* aims to foster greater discussion and networking whilst continuing practice. It also aims to attract those in industry and academia who approach sketching in HCI on a reflective level, and individuals not attending the course.

SIG Goals

SketCHI will discuss: 1) What are the significance, benefits and pitfalls of sketching in HCI? 2) How can we



Figure 6: Example materials required for each attendee



Figure 7: Sketching on location in London UK using Fig. 6 materials, Makayla Lewis

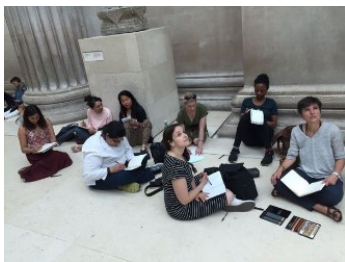


Figure 8: Makayla Lewis participating in-group discussions and sketching at British Museum UK with *SketchnoteLDN*

increase sketching recognition as a key skill in HCI curricula? (e.g. What key resources, techniques and tools should be included in HCI curricula?) 3) What is the future of sketching in HCI? (e.g. What research does the CHI community deem worthy of further investigation?) *SketCHI* will combine discussion and practice on location. Each discussion will take place at three different locations within CHI 2018 conference venue. The sketching activities will be divided into three themes relevant to CHI: context (landscape), people, and technology. Sketching on location will offer attendees an opportunity to practice sketching in a supportive and friendly environment (e.g. Fig. 6–11).

SIG Deliverables

The organizers will produce summaries of the groups discussions and share with attendees. Photos of attendee sketches and the SIG will be taken and could be shown at CHI 2018 poster session. At the end of *SketCHI*, organisers will launch an open '*Sketching in HCI*' online community. *SketchingHCI.slack.com* on Slack aims to enable continued discussions, collaborations, and resource sharing. To join the online '*Sketching in HCI*' community attendees will be asked to complete a short Google form:

<https://goo.gl/forms/vva3hSSqswax3QuC2> (Fig. 5).

Presentation and Schedule of SIG

1. **SIG room (10 minutes):** Introduction of the *SketCHI* background/goals followed by formation of groups, 4 to 6 attendees, depending on numbers. Each group will be facilitated by *SketCHI* organizer.
2. **Walk to location 1 and ice breaker (5 minutes):** attendees will be asked to introduce themselves: name, institution, research interests, and how they use sketching in their HCI research.

3. **Discussion 1 (10 minutes):** attendees will pick a vantage point and create sketches of a landscape, focusing on the ability to capture the big picture, while discussing 'What are the significance, benefits and pitfalls of sketching in HCI?'
4. **Walk to location 2 (5 minutes):** attendees will be asked to share sketches within their group and conclude discussion 1.
5. **Discussion 2 (10 minutes):** attendees will pick a vantage point at location 2 and create sketches of people and their activities, focusing on the dynamics of human movement (e.g. Figs. 9–11), whilst discussing 'How can we increase sketching recognition as a key skill in HCI curricula?'
6. **Walk to location 3 (5 minutes):** attendees will be asked to share sketches within their group and conclude discussion 2.
7. **Discussion 3 (10 minutes):** attendees will pick a vantage point at location 3 and create sketches of technologies being used (e.g. devices, signage), focusing on details and subtleties, and depicting what is most of interest, while discussing 'What is the future of sketching in HCI?'
8. **Walk to SIG room (5 minutes):** attendees will be asked to share sketches within their group and conclude discussion 3.
9. **CHI venue (10 minutes):** *SketCHI* will end by launching sketching in HCI online community: *SketchingHCI.slack.com* (Fig. 5).

A 10-minute float time has been included to allow for varied attendee walking pace. At *SketCHI* locations, the organizers will interact with the groups, sketching and participating in-group discussions (e.g. Figs. 7– 8). Finally, organizers will ensure attendees are not in the way of activities of CHI 2018 conference attendees.

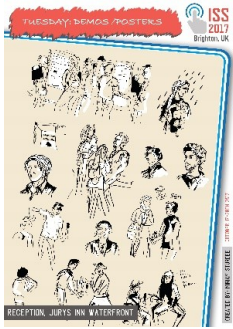


Figure 9: Sketch on location at ISS2017, Miriam Sturdee

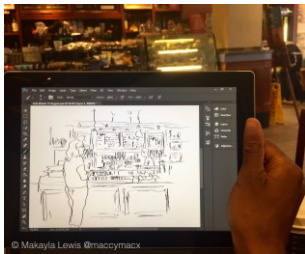


Figure 10: Sketch on location at a coffee shop, Makayla Lewis



Figure 11: Sketch on location during circus training, Thuong Hoang

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