

Figure 1: *SketCHI #1* attendee sketch on the supplied SIG template by @krlx_dev



Figure 2: On location sketch, Miriam Sturdee at *SketCHI #1* SIG

SketCHI 2.0: Hands-On Special Interest Group on Sketching in HCI

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ABSTRACT

Sketching is universal. It enables us to work through problems, communicate complexity, work with people who have diverse needs, and document work processes we employ within Human-Computer Interaction. Increased interest in sketching as a methodology within HCI has led to

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Figure 3: Observational sketches on location at ACM ISS'17, Miriam Sturdee

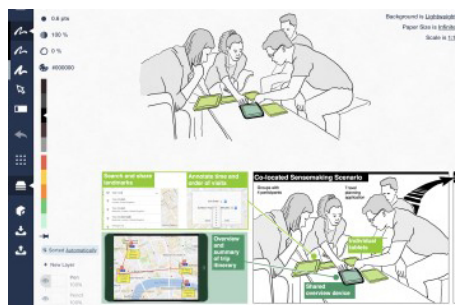


Figure 4: Sketching multi-device use (in Concepts), Nicolai Marquardt

increased attendance of interactive courses, meet-ups, and discussion groups, from those who are complete beginners, to seasoned researchers with the skills and knowledge to support others. By bringing together these individuals, we are able to advance the understanding of how sketching underpins research, and how we might work with sketching as technology advances. *SketCHI 2.0* aims to support ongoing discussions and collaborations around sketching in HCI, and further build the Sketching HCI community. As well as drawing on location, feedback, and discussion, we will form collaborative working groups to further our collective interest in this area and conduct high-level discussions about the practical applications and outputs of sketching in HCI.

CCS CONCEPTS

• **Human-centered computing** → **Human computer interaction (HCI).**

KEYWORDS

Sketching; Sketchnotes; Visual Communication; HCI; Co-Creation; Community Building

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INTRODUCTION

Freehand sketching is of great value as a process, input, output, and tool but can be limited in application to personal expression at home or within work settings [8]. Often overlooked across non-design disciplines, this ‘soft’ skill can support researchers to ideate [11], collaborate, document [3], and explore [5] complex themes and spaces. Over the past five years however, its significance has grown, it has become a sought-after skill within academia that has caused a surge in courses [2, 7, 9], workshops and tutorials [6], special interest groups [8], live-scribing at high-profile events [14], reference books [1, 4, 10], and social media communities, e.g. Twitter hash-tags #Sketching, #SketCHI, and #Sketchnotes, that supports researchers through their work processes. Although now HCI researchers are beginning to embrace sketching as part of their everyday practice, their processes and/or ‘unpolished’ work are often not shared amongst their peers or produced as tangible research outputs. The sharing of these sketches can connect ideas and thoughts in unexpected and new ways, they can foster engaging discussions that are built on a ‘come and go’ approach where preciousness is disregarded in favour of collaboration or learning with peers.



Figure 5: Sketching on location at a coffee shop, Makayla Lewis

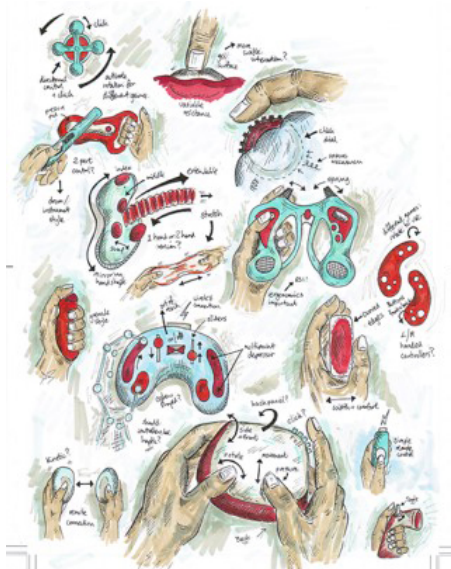


Figure 6: Iterative sketching, Miriam Sturdee

SKETCHI SIG #1

The first SketCHI held at CHI 2018 enabled discussions around the significance, benefits and pitfalls of sketching in HCI, increasing sketching recognition as a key skill in HCI curricula and the future of sketching in HCI. Attendees produced and shared observational sketches amongst each other (e.g. Figs 1 & 2), and connections were made between diverse research areas, bound by a shared interest in sketching. Of particular note was the discussion around sketching within undergraduate teaching and peer-to-peer learning, as well as knowledge exchange in this area and skills-exchange and advice from those with advanced training in sketching. A break-out group was formed in the SIG room, where discussions mirrored those actively on location. The outputs and insights generated from *SketCHI* were shared on social media, and formed part of the *SketCHI* ACM Interactions feature article [12] and on-going blog series [13]. CHI 2018 attendees expressed an interest in attending a follow-up SIG at CHI 2019.

SKETCHI SIG #2 GOALS

The goal of the SIG is to co-create a sketching in HCI manifesto whilst continuing practice in a friendly and supportive setting. **Sketching in HCI – Manifesto:** The attendees, working in groups of 4-6, will be asked to: a) Brainstorm what they *truly* want when sketching in a HCI setting, b) Identify and further discuss their most visionary (provocative and desired) ideas, and c) Create three to four sentences that capture their ideas clearly and concisely. To support note-taking the attendees will be given a handout (e.g. Fig 1) to summarize their discussions. They will then share their sentences with the wider SIG, it is hoped this will lead to incorporation, extraction, and or revision of sentences. This activity will use flip-chart and post-it notes to encourage group sharing and discussion. At the beginning of the SIG the attendees will be encouraged to consider the benefits, curriculum, resources, research, and publication of sketching in HCI. Following the SIG, the authors will construct a sketching in HCI manifesto that is concise/clear and grounded in the SIG discussions. The manifesto is to be posted to ACM Blog website, approval has already been sought from publication editors. **Sketching on Location:** *SketCHI 2.0* will combine the co-creation of the sketching in HCI manifesto with sketching practice on location. Each task will take place at three different locations within the CHI 2019 conference venue. The sketching activities will be divided into themes relevant to CHI: context (landscape), people, movement (e.g. Fig 4), and technology. Sketching on location will offer attendees an opportunity to practice sketching in a supportive and friendly environment. To support sketching the researchers will be given a handout that includes tips for sketching on location and movement (e.g. Fig 1). Sketching will take place at the first two locations, the final location (SIG room) will be a space to share, discuss and co-create the sketching in HCI manifesto.

Attendee Materials: A *SketCHI 2.0* handout (see Fig 1) will be given at the beginning of the walk, however sketching materials will not be provided by the authors. It is suggested attendees arrive with light belongings. For example, an A4 or smaller hardback spiral sketchbook for additional sketches and to lean on, black drawing pen, and two-coloured markers or pencils (a grey to add depth, colour to highlight important areas of the sketch). Authors will encourage sketching using pen and markers because mistakes cannot be erased, this will ensure attendees keep sketching.

Accessibility: *SketCHI 2.0* will involve 15 minutes walking around the CHI 2019 conference venue, 25 minutes standing on-location sketching, and 35 minutes seated in the SIG room. A 10-minute float time has been included to allow for varied attendee walking pace. Escalators, lifts and stairs will not be used during this SIG however slight elevation may be present. Attendees should be aware that there are seldom chairs or tables when sketching on location, thus comfortable clothing, shoes and a non-cumbersome bag, e.g. backpack, is suggested. *SketCHI 2.0* is suitable for wheelchair users; it may be unsuitable for people with reduced mobility. However, an alternative schedule can be provided (if required), attendees will remain in the SIG room for facilitated discussions 1 & 2. They will sketch from photos taken by the authors HCI research environments to be projected. Authors are mindful of the different access requirements of CHI 2019 conference attendees and are striving to ensure accessibility.

PRESENTATION & SCHEDULE

1. SIG room (10 minutes): Introduction of the *SketCHI 2.0* SIG background/goals followed by formation of groups, 4–6 attendees, depending on numbers. Each group will be facilitated by an author. **2. Walk to location 1 and ice breaker (5 minutes):** attendees, in their groups, will be asked to introduce themselves: name, institution, research interests, and how they use sketching in their HCI research. **3. Activity & 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, whilst brainstorming what they ‘truly’ want when sketching in a HCI environment. **4. Walk to location 2 (5 minutes):** attendees will be asked to share their sketches within their group and conclude discussion 1. **5. Activity & Discussion 2 (15 minutes):** a. (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 (Fig 3) and technology used (e.g. devices, signage, Figs 4, 5, & 6), whilst identifying and further discussing their most visionary (provocative and desired) ideas from discussion 1. b. (5 minutes) Attendees will be asked to create and note-take, using the provided handout, three to four sentences that capture their ideas clearly and concisely. **6. Walk to SIG room (5 minutes):** attendees will be asked to share sketches within their group and conclude discussion 2. **7. Co-create Manifesto 3 (25 minutes):** facilitated by the authors attendees will share their sentences with the wider SIG and then, using flip-chart and post-it notes, co-create a sketching in HCI manifesto. **8. SIG room (5 minutes):** *SketCHI 2.0* will end by photographing attendee’s sketches and introducing sketching in HCI online community: SketchingHCI.slack.com. At *SketCHI 2.0* locations, the authors will interact with the groups, sketching, and participating in group discussions (see *SketCHI #1* [8]). Finally, the authors will ensure attendees are not in the way of activities of CHI 2019 conference attendees.

AUDIENCE & SIG DELIVERABLES

SketCHI 2.0 will follow on from the authors’ (Lewis, Sturdee, & Marquardt) accepted CHI 2019 course *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 2.0* aims to foster greater discussion, networking, continued practice, and the co-creation of a sketching in HCI manifesto. It also aims to attract those in industry and academia who have an interest in or have used sketches to explore or emphasize HCI research in practice or on a reflective level, and individuals not attending the course. Attendees are not expected to be expert users of sketches in HCI, those new to the area or have a strong interest are also welcome.

The organizers will produce a Sketching in HCI manifesto grounded in the SIG discussions to be shared with attendees and the wider HCI community. Precisely, the manifesto will be written up (and visualized) and blogged as part of authors (Lewis, Sturdee, and Marquardt) ongoing collaboration with

ACM Interactions [13]. Additionally, photos of attendee sketches and the SIG will be taken and could be shown at CHI 2019 poster session. At the end of *SketCHI 2.0*, the authors will introduce the ‘Sketching in HCI’ online community (SketchingHCI.slack.com) on Slack, which 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>.

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