

So, you're interested in a PhD?

3 Papers I Wish I'd Written

In 2015, when I was a Masters student considering a PhD, my informal advisor Professor [Paul Resnick](#) suggested that I identify 3 research papers that I wish I had written. These should be **actual papers** that have been written by someone else and published. For students interested in working with me, please identify research papers in the field of human-computer interaction. A few places to look:

1. Search the [ACM Digital Library](#) (available for free via the SCU Library): <https://sculib.scu.edu/record=e1000003>
2. Search on Google Scholar
3. Use [Elicit AI](#) to identify papers in response to research questions you're interested in
4. The work I've published: <https://kailukoff.com/publications> (if you're interested in working with me)
5. If you find one paper you like, look at the other papers that it references -- some of those should also be of interest to you.

For those three papers, read the full paper and then analyze what kinds of questions they ask and which methods you would need to learn. I recommend this exercise to all students who are interested in a PhD as a way to clarify both the topics/questions and methods you are interested in. Here's [the version](#) that I created myself many years ago.

Paper title	Key research question(s)	Methods
Asthana, S., Hilleli, S., He, P., & Halfaker, A.L. (2023). <i>Summaries, Highlights, and Action items: Design, implementation and evaluation of an LLM-powered meeting recap system</i> . Link to paper	How can we improve LLM-powered meeting recaps? How can users provide high-quality feedback to the recap system, so that it can better align to the user's needs? (Because the biggest drawback in LLM-recap systems is the huge variance of each user's highlights needs.) How can we formalize the design rationales for LLM-powered systems like this?	• "Imperfect prototype experiences" • Used "CSCW Design and Evaluation systems" to evaluate the meeting recap's usefulness • Model training on (manually, crowd-sourced) annotated datasets so the recap can understand the "chapters" of a meeting • Prototyping (what the recap experience looks like on HTML) • Interviewed seven participants who were given tasks to perform so they can be observed
Franz, R.L., Junuzovic, S., & Mott M. (2024). <i>A Virtual Reality Scene</i>	How can we create a scene taxonomy for virtual reality (VR)?	• Literature review of both cognitive psychology and computer science

<i>Taxonomy: Identifying and Designing Accessible Scene-Viewing Techniques.</i> Link to paper	Is there a better scene-viewing technique for certain scene taxonomies? Will this lead to more accessible VR experiences?	• Review of 29 VR applications (the most popular at the time of research in Jul-Aug 2019) • User study to evaluate the combination of scene taxonomy, action, and scene-viewing techniques
Zhang, M. (2022). <i>Towards More Intelligent, Intuitive, and Inclusive Communication with Computers in Text and Images.</i> Link to paper	How can we help blind or low vision (BLV) users understand purely pictorial communications (i.e. emojis, GIFs)? How can we help those BLV users <i>use</i> those pictorial communications themselves in an intuitive and simple way (i.e. not having to tediously navigate to each emoji and hear the description)?	• Interviews with BLV users to understand their current situations • (Is this a method?) Built Voicemoji to test the hypothesis that a voice-commanded emoji-generating application would be beneficial to BLV users • User study to evaluate the performance of Voicemoji and test the above hypothesis

Key Learnings

- There were some papers I could not bring myself to finish even though I was convinced they would end up in this list just by reading the abstract.
 - The most important learning here, because it helped me realize which topics I was genuinely interested in versus what I *thought* was interested in
 - Also, that CSCW exists! (The entire time I thought HCI was the only choice. It turns out there are many more sub-interest groups.)
- I was most excited about reading how the experiments were designed and carried out, rather than how the technical intricacies worked.
 - Except for the Voicemoji development
- The methods used were actually very familiar — a nice surprise since I felt like I lacked research experience. Turns out I have some of the skills, just applied differently!
- Research papers follow a similar format:
 - Context and introduction of the problem
 - “Contribution” sentence
 - Literature review: works that have touched upon a similar problem and how this work is different/similar to them
 - Rationale for designing/building the solution/technology/*Thing That Tests Their Hypothesis*

- Recap of the designing/building experience
- Testing the technology/solution/*Thing That Tests Their Hypothesis*
- Conclusion which
 - Explains how they were successful in generating new knowledge in the space
 - (what I can only describe as) Anticipates and rebuts complaints from the reader
 - Poses remaining open questions for future studies to answer
- There's quite a bit of manual effort that goes into these studies of emerging technologies that supposedly will automate away all the redundancy of life.
- It is obvious when the authors are excited about the project and the results they have to share.