

Thesis Project Portfolio

Reflections on a Remote AI Training Function: A Job in Eliminating Jobs

(Technical Report)

Using the Evolution of the Instagram User Interface as a Case Study into the Ethical Implications of Infinite Scroll Interface Design

(STS Research Paper)

An Undergraduate Thesis

Presented to the Faculty of the School of Engineering and Applied Science

University of Virginia • Charlottesville, Virginia

In Fulfillment of the Requirements for the Degree

Bachelor of Science, School of Engineering

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Sociotechnical Synthesis

(Executive Summary)

A Study of Ethics: AI Training and Infinite Scrolling

For my thesis portfolio, I chose to write about entirely separate subjects. For the capstone technical report, I chose to write about my experience working a remote, asynchronous job doing AI code training. I was interested in concretely reflecting on the position as it was an incredibly unique experience, with both a very difficult—almost nonexistent—work culture and complex long-term moral implications. For my STS research paper, I chose to write about the ethical implications of Infinite Scroll Interfaces. This interested me because I have struggled a lot with technology addiction and screen time in recent years, especially since the emergence of Tik Tok and widespread Infinite Scrolling applications. Researching and understanding the applications from a design perspective ultimately helped me a lot with my own social media use.

In my technical report, I described the unique experience of working for the worker-facing subsidiary of a larger corporation, specifically designed to treat its work force as a fungible, renewable, and ultimately expendable resource. While frustrating given the impersonal nature of the job, the experience also allowed me technical practice in lots of hard skills such as Javascript, C++, SQL, etc. Additionally, the experience offered me the opportunity to become much more confident navigating uncertain work environments. Lastly, it was also a difficult job to wrestle with ethically, given that I was helping improve coding LLMs that have the potential to replace my future jobs.

In my STS research paper, I showed how the evolution of Instagram, both from a front-end and back-end design perspective, is emblematic of the disregard for consumer-ethics present

in the current social media attention-economy. I argued that Infinite Scroll interfaces have an unparalleled ability to enrapture users into continued use, and how this negatively impacts user well-being. I then described the ethical facets to Infinite Scroll, specifically within the context of treating it as “Engineering as Social Experimentation”. Especially, I highlighted that subject-monitoring, a virtue of ethical engineering that is normally beneficial, in IS media like Instagram is instead used maliciously to increase user-use, target susceptible demographics for advertisements, and generally oppose the other virtues of ethical engineering as social experimentation.

Altogether, through writing both essays I learned how cultural, technical and organizational elements all interact together to create a holistic understanding of ethical impact. In my technical report and predated work experience, I was incredibly disappointed with how the lack of company culture and siloed organization led to difficult and ambiguous situations in my technical work. In my research paper, I was disgruntled to discover how the technical implementations of Infinite Scroll interfaces produce negative user-experience and culture. In both essays, considering the STS perspectives of the subject matter helped illuminate ethical concerns that, when looked at surface-level, had been previously easy to miss.