

Skills: Python, C, SML, HTML/CSS/JS, Java, LaTeX, Linux/UNIX, Figma, Unity, Microsoft Office, Autodesk Inventor, Revit, Fluent in English and Mandarin Chinese

Education and Involvement

Carnegie Mellon University School of Computer Science

Aug 2021 - May 2025

B.S. in Human-Computer Interaction

- **Courses:** 15-112 Fundamentals of Programming & CS, 15-150 Principles of Functional Programming, 15-122 Principles of Imperative Computation, 15-281 AI Representation & Problem Solving, 05-410 User Centered Research & Evaluation, 85-213 Human Information Processing in AI, 15-251 Great Ideas in Theoretical CS, 05-317 Design of AI Products & Services, 15-213 Computer Systems, 05-430 Programming Usable Interfaces
- **Society of Asian Scientists and Engineers - Marketing Director** - Oversees marketing for all events (social media, email, etc.)
- **Design for America - Designer** - Provided website design services to a local non-profit organizations, currently working with student mental-health organization to design club operations and initiatives through a marketing lens.

Experience

Research Assistant

May 2022 – Present

Human-Computer Interaction Institute - OH!Lab

- Collaborating on a NSF-funded project led by Professors Amy Ogan, Jessica Hammer, and Motahhare Eslami (*Collaborative Research: A Social Programmable Robot Fostering Rapport to Improve Computer Science Skills and Attitudes*).
- Developed and conducted multiple rounds of an interactive workshop that included robotics, basic AI concepts, and programming instruction, and collected qualitative data for thematic analysis using inductive open coding.
- Performed extensive background research and literature review on Fairness, Accountability, Transparency, and Ethics (FATE) in AI, as well as moral development theories and currently researched perspectives on algorithmic fairness.
- Designed and tested iterations of a tabletop game designed to teach concepts of training data and bias in artificial intelligence.

Publications

- Solyst, J., **Yang, E.**, Xie, S., Eslami, M., Hammer, J., & Ogan, A. (**Conditionally Accepted with Minor Revisions**). The Potential of Diverse Youth in Identifying and Mitigating Algorithmic Bias for a Future of Fair AI. The Annual ACM Conference on Computer-Supported Cooperative Work And Social Computing (CSCW).
- Solyst, J., Xie, S., **Yang, E.**, Stewart, A.E.B., Eslami, M., Hammer, J., & Ogan, A. (**Accepted + Honorable Mention Award**). "I Would Like to Design": Black Girls Analyzing and Ideating Fair and Accountable AI. The Annual ACM Conference on Human Factors in Computing Systems (CHI).

Projects

Kindness First Penguin - UI Designer and Programmer

- Awarded Meta Best Community Hack, DFA Best Hack for Social Good, and Impact CMU Faculty Judge Winner.
- Created a chrome extension called Kindness First Penguin that takes in users' texts and changes the emotional state of a virtual pet based on the sentiment polarity of the texts. This project aims to reduce the online disinhibition effect and encourage users to talk more constructively over the internet.

Citadel, Citadel Securities, and Correlation One 2022 Summer Invitational Datathon - Programmer/Researcher

- Selected to compete in global-scale datathon. Developed multi-class classification machine learning model to predict loan grading and subgrading using data from a peer-to-peer lending platform. Utilized Google Colab, Tensorflow, and Keras.

EveryWay - UX Researcher & Designer

- Conducted contextual interviews, speed dating sessions with storyboards, usability tests, and surveys to gather data about how college-aged users typically planned their trips. Analyzed the user data through interpretation notes and affinity clustering to design a low-fidelity travel-planning tool prototype, which was then tested using tools such as the System Usability Scale.

CapyAlert - HackCMU 2022 - UI Designer & Programmer

- Created an app to provide support for people to call for help in dangerous situations without arousing suspicion from those around them. The user appears to be playing a typical mobile game, but are actually calling 911, emergency contacts, etc.

112 Term Project - Programmer

- Wrote 1000+ line Python game with a focus on UX. Implemented random maze generation and search algorithms from scratch.

Honors and Awards

Undergraduate Research Presentation Award; Coca-Cola Scholars Program Semi-Finalist; National Merit Finalist