

Samantha Henry

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EDUCATION

University of California, Irvine
B.S. Biomedical Engineering

September 2024 - Present

Certifications: AI in Healthcare Specialization (Stanford Online), Foundations of Healthcare Systems Engineering (Johns Hopkins)

EXPERIENCE

Pfizer Advanced AI-Powered Document Intelligence - Extern July 2026 - Present

- Develop AI-powered document processing workflows using Python, OCR, NLP, and RAG systems
- Build LLM-assisted information retrieval tools for pharmaceutical documentation analysis
- Design a Gradio-based chatbot enabling real-time, conversational document interaction

Haun Lab - University of California, Irvine

June 2026 - Present

Research Assistant

- Conduct research on nanoengineering approaches for biomolecular detection and targeted therapeutic delivery, supporting biomedical device-relevant innovation
- Perform hands-on laboratory techniques, including indirect ELISA, to characterize antibody-antigen interactions and validate assay performance
- Design and execute nanoparticle-based experiments, testing formulations and troubleshooting methods to improve assay reliability
- Analyze experimental data and maintain laboratory records, collaborating with graduate researchers to advance translational biomedical engineering research

Kids Teach Tech

December 2019 - September 2025

Director of Human Resources, Live Instructor, Curriculum Designer, and Technical Trainer

- Taught free computer programming classes to 5,000+ underserved youths across the globe
- Grew team to 50% female representation across 100+ members as the organization's first female member
- Developed STEM courses in partnership with UC Berkeley and Georgia Tech
- Led recruitment, onboarding, and instructor training

The Seth Bonder Camp

June 2022 - July 2024

Instructor

- Developed and taught DNA Sequencing and Breast Cancer Detection courses using Python
- Integrated advanced STEM topics into curriculum, including machine learning, robotics, decision optimization, data science, and medical diagnostics
- Partnered with UC Berkeley IEOR and Georgia Tech IYSE to deliver free in-person and virtual classes to 300+ underrepresented youths during summer

ACTIVITIES & AFFILIATIONS

Biomedical Engineering Society
Active Member

September 2025 - Present

Society of Women Engineers
Active Member

January 2026 - Present

SKILLS & INTERESTS

Interpersonal Skills: Communication; Mentorship; Relationship Building; Change Management

Technical Skills: Artificial Intelligence (including use of LLMs, ChatGPT, Claude); Python; OCR; RAG Systems; Qualitative Research and Analysis; SolidWorks; Research Coordination; Project Management;

Microsoft Office

Languages: English (fluent); Spanish (intermediate)