# Hannah Clay

614-307-9254 | hclay116@gmail.com | www.hannahgclay.com

## EDUCATION

**Stanford University** — **Stanford, CA**

*Bachelor of Science, Computer Science (Biomedical Computation Track) | GPA 3.922* — *June 2025*

*Master of Science, Computer Science (Artificial Intelligence Track) | GPA 3.89* — *August 2026*

Coursework: Mining Massive Datasets, AI: Principles and Techniques, NLP with Deep Learning

## EXPERIENCE

**Verkada** — **San Mateo, CA**

*Software Engineer Intern* — *June-September 2025*

- *Created an automated workflow for Alarm Licence Certificate generation using Temporal*
- *Built a voice agent that leverages real-time LLMs for speech-to-speech capabilities on the Alarms Response team*

**Bioinformatics Institute, A*STAR** — **Singapore**

*SIPGA Internship Awardee* — *June-September 2024*

- Developed a Next.js web application from the ground up, integrating a tissue segmentation AI model with a custom visualization tool.
- Integrated the application with AWS services, including Amplify, DynamoDB, S3, and SageMaker, to manage hosting, the ML pipeline, and backend database operations.

**Dropbox** — **Remote**

*Software Engineer Intern* — *June-September 2023*

- Implemented a full-stack development project for Dropbox Enterprise, enhancing functionality by implementing bulk actions using TypeScript, React, and Python for the backend.
- Contributed to the redesign and migration of Dropbox Enterprise Members page, collaborating closely with the Design team and product manager.

**Code in Place** — **Stanford, CA**

*Curriculum Designer* — *January-June 2023*

- Co-authored an online course reader for Stanford's global, virtual computer science class from scratch, creating original and engaging content and examples to illustrate key concepts for students worldwide.

**OXOS Medical** — **Atlanta, GA**

*Software Engineer Intern* — *June-August 2022*

- Developed multiple computer vision models for an X-ray device using Python and TensorFlow, including key point detection and image segmentation models.
- Managed the entire machine learning pipeline, from data collection and annotation to preprocessing, model construction, and research.
- Conducted extensive hyperparameter tuning to optimize model performance and ensure accurate results.

## PROJECTS

**CoST: Code Switching Translation Data Augmentation Method** — **Python, PyTorch**

- Developed a machine translation-based data augmentation method for code-switched text using a fine-tuned mT5
- Improved CoSDA code-switched text accuracy on XNLI by more than 2x

**GridFlow Smart Traffic Light** — **Python, PyTorch, SUMO**

- Designed and implemented a smart traffic light system using YOLOv5 for real-time car detection and q-learning/DQN algorithms to dynamically optimize traffic flow at a single intersection

**BattleDart** — **C, Raspberry Pi**

- Developed integrated hardware and software project on Raspberry Pi constructing an 8x8 grid of magnetic sensors and connecting it to a custom-programmed computer-displayed game of battleship.

## SKILLS

- **Programming Languages**: Java, JavaScript, C, C++, Python, TypeScript
- **Tools:** React.js, AWS, Next.js, Node.js, MySQL, Git, PyTorch, TensorFlow
- **Languages:** English (native), Mandarin Chinese (intermediate)