Shannon Jade Liu

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EDUCATION

Cornell University, College of Engineering

Ithaca, NY

Bachelor of Science in Computer Science

August 2023–December 2026

EXPERIENCE

Cybersecurity Engineering Intern

June 2025–Present

FactSet Research Systems Inc.

Norwalk, CT

- Worked on the Security Automation and Analytics team to build scalable, cloud-native security solutions and improve security tooling infrastructure
- Deployed the OpenCTI threat intelligence platform in FactSet's EKS (Elastic Kubernetes Service) environment using Helm, GitHub Actions, and AWS Secrets Manager, improving internal threat visibility and automation of intelligence workflows
- Collaborated closely with engineers, security analysts, and infrastructure teams through daily standups and town hall meetings to align automation with compliance, threat detection, and operational security goals

Imaging Systems Software Engineer

October 2023-Present

Cornell University Unmanned Air Systems (CUAir)

Ithaca, NY

- Designed and built the "Plane System," a Python/Rust-based Raspberry Pi application for GoPro image capture and settings control and real-time telemetry transmission; actively used by 60+ engineers on an autonomous aircraft for search and rescue competitions
- Developed the "Logs Page," a full-stack web application using Java, JavaScript, HTML, and CSS to record and analyze test flight data, integrating real-time telemetry, imagery, and user input via APIs
- Led 10+ system tests, including unit, integration, and end-to-end validations; identified and resolved critical bugs in Wi-Fi setup, command communication, and hardware-software integration

Research Intern

June 2024–Present

Interaction Research Lab @ Cornell Tech

New York, NY

- Contributed to the Bystander Affect Detection (BAD) Robots project to study how robots can detect and respond to repeated failures in human-robot conversations and improve robot communication
- Analyzed visual, audio, and motion data from 30+ human-robot interaction videos involving successive wizarded robot failures; extracted 66 features across 28K+ datapoints using Python and open-source libraries
- Built, trained, and evaluated multimodal time-series models (RNNs, transformers, linear classifiers) in TensorFlow and PyTorch using early, intermediate, and late fusion techniques for error granularity detection; achieved 90% intraparticipant and 70% interparticipant accuracy
- Published a peer-reviewed paper and presented at the 20th IEEE/ACM International Conference on Human-Robot Interaction, titled <u>"I'm Done"</u>: <u>Describing Human Reactions to Successive Robot Failure</u>

Software Engineer Intern

July 2022

Trillium Trading, LLC

New York, NY

- Built and enhanced 6 Java-based trading simulators replicating stock quoting, borrowing, and authentication workflows, enabling safe, cost-free testing and supporting a production server used by 100+ equity traders
- Developed reusable tools and utilities to streamline request/response handling with broker-dealer APIs in a high-frequency trading environment, improving code modularity and deepening expertise in socket programming, network communication, and JSON-based protocols

SKILLS

- Programming Languages: Python, Java, Rust, C++, JavaScript, HTML/CSS, SQL, OCaml
- Frameworks / Libraries: Tensorflow, PyTorch, NumPy, Pandas, Matplotlib, React.js, Spring Boot
- Developer Tools: Git, Docker, Kubernetes, Helm, Github Actions, AWS, Weights & Biases, Label Studio