

PROFESSIONAL OVERVIEW

Developer with strong Python and Java skills and experience in full stack frameworks like PyQt5, Java Spring, React and SQL. Comfortable working in agile teams and utilizing CI/CD best practices (Git and Docker). Experienced in debugging, object-oriented design, and full stack systems from design to implementation. Eager to contribute to a fast-moving development team and gain practical SWE experience.

WORK EXPERIENCE

Research Assistant at University of Rochester

Rochester, NY | June 2023 – December 2024

- Wrote Python scripts for automating experiment workflows from algorithm execution to data collection
- Explored mathematical concepts (sub-modularity, gradient approximation) for efficient algorithm implementation
- Utilized an SSH and Git workflow within a Linux environment to maintain and run code remotely
- Designed PyTorch pipelines for training deep learning models and pre-processing image/tabular datasets

Engineer Intern at Novanta

Rochester, NY | June 2022 – September 2022

- Contributed to and debugged a GUI application using PyQt5 and OpenCV
- Utilized Agile development methodologies in a multi-developer environment
- Integrated low level motor-control logic into a GUI application
- Utilized Git to manage feature branches and successfully merge pull requests

SOFTWARE PROJECTS

Punch Lite Time Clock

Open-Source Project | <https://github.com/mflynn840/PunchLite>

- Full stack Java Spring and React time clock application
- Implemented login screen using JWT tokens
- Wrote JavaScript, HTML and CSS for styling the UI
- Connected frontend to backend by exposing REST APIs
- Correctly utilize the repository, service and controller layers for clean, maintainable code

Cash Ninja Stock Market Simulator

Open-Source Project | <https://github.com/mflynn840/CashNinja>

- Designed an SQL database schema and wrapper classes to support real time price updates and logging of user transactions
- Implemented PyQt views with signals to create a GUI and connect it to the database

EDUCATION

University of Rochester
Rochester, NY

B.S. Computer Science
GPA: 3.73

Graduated May 2025

RELEVANT COURSES

- Algorithms
- Independent Study
- Computer Security
- Compilers
- Deep Learning
- Machine Learning
- Calculus/Linear Algebra
- Formal Models

LANGUAGES

- Python (5 Years)
- Java (4 years)
- C (3 Years)
- SQL (2 Years)
- HTML/CSS (2 years)
- JavaScript (1 year)

FRAMEWORKS

- Git (4 years)
- PyQt5 (3 years)
- PyTorch (3 years)
- Agile (2 years)
- Java Spring (1 year)
- React (1 year)
- Docker (1 year)