Miranda Luo

🔗 mluo24.github.io · ✉ mml267@cornell.edu · ⌨ github.com/mluo24 · in linkedin.com/in/miranda-luo

📞 732-887-6531

Education

Cornell University   Ithaca, NY
Bachelor of Arts in Computer Science and Biological Sciences, GPA - 3.85   *expected May 2024*
- **Relevant Coursework**: OOP & Data Structures, Discrete Math, Functional Programming, Backend, Web Development, Algorithms, Data Driven Web Apps, Computer Systems and Architecture, Computer Vision

Experience

Meta (Instagram)   Menlo Park, CA
Software Engineer Intern   *May 2022 - August 2022*
- Developed clients and backend tests for Django code to realize IG Basic Ads, compliant with first party data usage
- Spearheaded new thrift-python migration in feed ads delivery platform infra for more efficient dev. experience
- Performed experiments on migrations observing ad impressions, revenue, and latency, maintained said metrics
- Wrote Django script to automatically search and replace Python function decorators for safe data handling policies

Cornell Design & Tech Initiative   Ithaca, NY
Technical Product Manager   *September 2021 – Present*
- Adding data export & OAuth Firebase and Express API authentication for Zing-LSC, a tool for study partner pairing
- Implementing match UI functionality on Zing, a tool for professors to intelligently form groups of students
- Upgrading React project component library to take advantage of MUI v5 system styling and theme capabilities

Cornell Bowers CIS   Ithaca, NY
Teaching Assistant   *August 2021 – Present*
- Fall 2022 - Present: Computer System Organization and Programming TA (400+ students in class)
- Fall 2021 - Spring 2022: Data Structures and Functional Programming Consultant (400+ students in class)

Workstream   San Francisco, CA
Full-Stack Software Engineer Intern   *June 2021 – August 2021*
- Developed state tax withholding form UI & HelloSign signing onboarding module for >100 businesses with React
- Designed and wrote APIs for dynamic search of ADP workers and extra data submission through form to ADP
- Resolved bugs and high priority tickets as reported by customer service, wrote tests for backend with Ruby on Rails

Kadmon Corporation   New York, NY
Molecular Signaling Summer Intern   *June 2019 – July 2020*
- Predicted positive protein crystallization conditions with 90% accuracy of prediction over last generation with reinforcement learning algorithms
- Researched and presented basic machine learning findings for use in drug development to the department

Projects

EVTrain | *Vue, TypeScript* - evtrain.vercel.app
Developed an app to keep track of EV values, a useful technique for Pokemon competitive battling. Implemented Pinia stores, RESTful API calls and caching for Pokemon data lookup, and intuitive form data entry for EV values.

Cornell Simulator (Game) | *OCaml* - github.com/mluo24/CornellSimulator
Created a 2-D tile-based single-player game simulating the life of a student. Implemented and optimized a tileset engine to easily create game maps with separate interactive layers. Integrated a mission & leveling-up system.

FRC Robotics Scouting Server | *Laravel, PHP, MySQL* - github.com/mluo24/pascack-pioneers-scouting-2020
Led a team of 3 to develop database for >80 users to upload robot scouting information. Designed an innovative form corresponding to game field. Implemented Google OAuth & query system for searching data formatted for analysis.

Improving Semi-quantitative Colorimetric Test Kits | *Python* - github.com/mluo24/p-colorimetric-analysis
Researched algorithm to determine concentration of phosphorus through spectrometer absorbance curves and smartphone pictures. Determined 90% fit of association of RGB values and solution absorbance to concentration.

Technical Skills & Awards

Languages: Java, Python, JavaScript, TypeScript, OCaml, PHP, C++, SQL (Postgres, MySQL), C, Ruby, R
Frameworks: Django, React, Vue, Node.js, Express, Flask, Ruby on Rails, Laravel, MUI, WordPress, D3
Libraries/Technologies: HTML/CSS, Tailwind, Git, RESTful APIs, OAuth, Firebase, pandas, NumPy, scikit-learn, thrift
Awards: Aspirations in Computing Distinction (NCWIT), Computing Awards Honorable Mention (NJRSF), Dean's List