Erin Xu

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EDUCATION

Cornell University, College of Engineering, *Ithaca, NY* **Expected: May 2025**

Intended: Bachelor of Science in Computer Science

- GPA: 4.091/4.3 | Courses: Data Structures, Algorithms, Machine Learning, Computer Systems, OS, Computer Architecture
- **Activities:** Cornell Design & Tech Initiative, Women in Computing Cornell
- **Honors:** Dean's List, Citadel Trading Challenge, Optiver Insight, Datadog Summit, Cornell Hack Challenge "Best Overall"

SKILLS & INTERESTS

- **Languages**: Java, Python, C, Swift, Dart, SQL, HTML/CSS, JavaScript, Typescript, C++, Kotlin, Go
- **Technologies:** BeautifulSoup, ReactJS, Git, Jupyter Notebook, Firebase

EXPERIENCE

Hudson River Trading | *Core Development Intern* **May 2024 - Aug 2024**

- Developed new tooling in asynchronous Python to support end-to-end testing of over-the-counter trading workflows
- Leveraged C++ to write a daemon to better book manual trades, implementing disaster recovery and external state-tracking
- Designed and implemented a tool providing ergonomics around configuring custom data streams to run simulations on

Datadog | *Software Engineer Intern (Revenue Data Engineering)* **Jan 2024 - Apr 2024**

- Completed concurrency optimization of data intake service, conducted load tests to portray results and tune configurations
- Identified vulnerabilities, initiated conversations, implemented changes to improve fault tolerance of existing services
- Designed and implemented authorization for internal API, communicating with other teams to determine best interface
- Identified potential points of failure, set up monitors and runbooks for service undergoing performance readiness review

Arcesium | *Software Engineer Intern (Platform Integration)* **May 2023 - Aug 2023**

- Leveraged Python, Kotlin, SQL to bootstrap clients onto a new PNL pipeline, backpopulating the necessary dependencies
- Implemented the backend logic to maintain a consolidated audit trail for admin action APIs in the PNL pipeline data flow
- Programmed Kotlin library used by many company apps to automate the process of setting up API calls on the frontend
- Wrote the logic to parse Kotlin apps and generate all Typescript models and functions for frontend API communication

Hudson River Trading | *Trading Technology Intern* **Jan 2023 - Jan 2023**

- Programmed in C++ to implement an order book and matching engine to execute trades on the BATS Exchange
- Conducted signal research, constructed a trading strategy, and tested using previous market data and through live trading

Cirrus Logic | *Software Development Engineer Intern* **May 2022 - Aug 2022**

- Automated workflow of importing chip requirements into requirement management system by creating checker process
- Built Python end-to-end checker to efficiently detect import errors, improving accuracy and scalability of import flow
- Performed complex HTML processing using BeautifulSoup library and implemented multilayer comparison algorithm
- Exceeded expectations by reducing deltas by 89% and runtime by 86%, shortening import process from hours to minutes

TeaCup | *Software Development Intern* **Dec 2021 - Jan 2022**

- Programmed iOS app using Swift that serves as a community-building social media platform targeting elderly population
- Designed NoSQL database structure implemented using Amazon DynamoDB to persistently store data required by the app
- Integrated Agora SDK to create real-time video calling functionality and Firebase to allow for user login and authentication
- Conducted market research and user surveys, analyzed findings to make product design decisions for an early-stage startup

PROJECTS

Queue Me In | *Cornell Digital Tech & Innovation Project* **Oct 2021 - Present**

- Collaborated with designers and developers to program web app (Queue Me In) to schedule/facilitate Cornell office hours
- Leveraged React, Typescript to present a clean, easily-navigated user interface based on wireframes created by designers
- Built calendar export functionality and restructured system for professors to import roles manually or through file upload
- Proposed design improvements at weekly standups based on interviews and surveys from students/TAs using the platform

Sports Tracker App | *Cornell Hack Challenge "Best Overall" Winner* **Dec 2021**

- Developed and designed an iOS app using Swift that tracks past and current sports data for all Cornell varsity sports
- Devised a backend system with a SQL database and an API that holds serialized Cornell sports event data posted by teams
- Created functionalities to filter through sports events by gender and/or sport and view complete schedules for desired teams