Sam Perlmutter

Product-Driven Software Engineer

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EDUCATION

UNC Charlotte (Jan 2020 – May 2022)
- MS, Computer Science
- Concentration: AI & Robotics

Building intuitive tools to streamline workflows and boost productivity.

Blending technical skills with user-centric design across various domains.

UNC Charlotte (Aug 2018 – May 2021)
- BS, Computer Science
- Concentration: AI & Robotics

Passionate about mentoring developers and leveraging technology to solve real-world challenges.

RELEVANT SKILLS

- Languages: Java, Swift, Python, HTML, CSS, JavaScript, TypeScript, Rust, Kotlin, PHP, MySQL, SQL Server
- Technologies: iOS, watchOS, SwiftUI, JUnit, Mockito, Figma, Linux, Android, Git, Angular, Spring Boot, Docker, Firebase

WORK EXPERIENCE

Software Engineer – Charlotte, NC (Jun 2022 – Present)

Wells Fargo

- **Developed** and improved on the simulation-based framework calculating the current and future credit risk of firmwide derivative exposures using **Java**, **Spring Boot**, **SQL**, and **Python**.
- **Collaborated** with model developers and backtesting quants to ensure the accuracy of the market generation meets or exceeds industry standards for modeling all material risk factors via monte carlo simulation.
- **Expanded** test coverage from less than 20% to over 70% by implementing comprehensive unit and integration tests.

Technology Intern – Charlotte, NC (Jun 2021 – Aug 2021)

Wells Fargo

- **Designed** a workflow to automate tedious workflows and improve overall efficiency of the support team.
- **Built** a web dashboard using **Angular**, **Spring Boot**, and **SQL Server** to enable the support team to better track and maintain hundreds of different streams of data.

Machine Learning Intern – Tel Aviv, Israel (Jun 2019 – Aug 2019)

RenewSenses Ltd.

- **Evaluated** accuracy and speed of various convolutional neural networks running on mobile phones in order to aid the visually impaired in navigating their environment.
- **Trained** neural networks to detect common household objects.

PROJECTS

YETI Scouting App (Mar 2015 – Present)

- **Led** a team that developed a web app to record and aggregate data on robots competing in FIRST Robotics Competition matches in order to more effectively strategize match play.
- **Ensured** database schemas and form fields were kept up to date across seasons.
- **Garnered** feedback from users to improve UX and the reliability of collected data.

Repometer

- **Built** a custom timer interface for counting workouts.
- **Communicated** with users to gain feedback for product design.
- **Designed** color scheme, app icon, UI/UX using **Figma** and **SwiftUI**.

VOLUNTEER WORK

Lead Programming Mentor (Aug 2017 – Present)

YETI Robotics

- **Mentors** Charlotte-area high school students in programming and wiring robots designed to compete in the FIRST Robotics Competition.
- **Introduces** high school students to concepts and applications of real-time object recognition in video for use in autonomous robots.
- **Teaches** high level **Control Theory** concepts such as PID loops to high school students to implement in advanced robotics scenarios.