Patrick McElroy

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EDUCATION

UNIVERSITY OF MICHIGAN

Ann Arbor, MI

Bachelor of Science in Computer Science in the School of Engineering, Minor in Business from the Ross School. May 2023 GPA: 3.93/4.0 – 3x Dean's List; 4x University Honors, James B. Angell Scholar

Coursework: Introduction to Operating Systems (C++), Machine Learning (Python), User Interface Development (HTML/CSS/Vue.js), Programming and Data Structures (C++), Data Structures and Algorithms (C++), Linear Algebra.

EXPERIENCE

BLOOMBERG L.P. New York, NY

Software Engineer

Sep 2023 - Present

- Maintain key service infrastructure for privileging multiple Enterprise Products with intensive latency requirements
- Developed multiple new libraries and services in Python and C++ used by teams across the Enterprise Products organization
- Worked with many stakeholders to push out key project migrating from internal privileging to client facing self-enablement
- Regularly handled on call duty and triaged multiple critical incidents before they became meaningfully impactful to clients
- Developed user interface for experimental AI tool transforming the client experience with critical risk management product

BLOOMBERG L.P.

New York, NY

Software Engineering Intern

June 2022 – Aug 2023

• Developed an appointment scheduling plugin inside Instant Bloomberg, the Bloomberg terminal's proprietary chat service

- New plugin would allow users to bring up the internal Bloomberg appointment scheduler straight from messages
- New plugin would allow users to oring up the internal Bloomberg appointment scheduler straight from messages
- \bullet Deployed my code to production machines, resulting in the elimination of up to 50% of the previous steps for this workflow

CONVERT SOLAR

Norfolk, VA

Software Engineering Intern

May 2021 - Aug 2021

- Designed, developed, and created a testing program for an internal mobile application using Sketch, Swift, Zapier, Firebase Cloud Storage, and TestFlight to be used by 50+ panel installers to upload pictures and follow a checkout process at each site
- Oversaw app use in select install teams as the company grew from 10 to 30+ solar installs per week
- Set up all residential solar installs in their respective monitoring platforms, created a system within Salesforce to do this more efficiently, and taught the process to a new hire taken on just to create sites to deal with the increasing rate of panel installs

PERSONAL PROJECTS

STOCKBOT – Personalized automated trading

Sep 2020 – Mar 2021

- Interfaced with a custom-built Robinhood API to develop a customizable, automatic, and personalized trading bot in Python
- Scanned the market every second with an algorithm built to take advantage of Modern Portfolio Theory and other models
- Traded stocks in increments of up to 5% of my total buying power and eventually led to a 20% increase in portfolio value

RCRD – Goal tracking mobile application

Sep 2019 – Mar 2020

- Designed and developed a mobile IOS app that could track and display progress on a user's custom goals in an intuitive way
- Built using Swift and Objective-C for the frontend and connected to a Firebase database backend that would store user data
- Wrote a curator-selected Medium article describing my process throughout creating the app and the different skills it required

LEADERSHIP EXPERIENCE

$\textbf{BLOOMBERG AI ENGINEERING PRODUCTIVITY FORUM} - Founder \ and \ Co-Lead$

Mar 2025 – Present

- Founded and co-lead 300+ member AI Engineering Productivity Forum for sharing AI automation best practices
- Organized speakers from across the engineering branches of the company and hosted demos on AI-powered engineering tools
- Contributed to Bloomberg-wide documentation and playbooks for emerging AI tooling to accelerate onboarding and adoption

SHIFT CREATOR SPACE – Co-Director

Mar 2021 – May 2023

- Co-manage a club of 30+ student creatives focusing on pushing members to execute and providing entrepreneurial resources
- Lead a smaller group of 8 students in weekly in-person meetings to keep track of progress and mentor struggling creators
- Coordinate meetings and presentations with company speakers from Duo, Cisco, and the Ann Arbor Art Center among others

SKILLS

Programming – Proficient: Python, C/C++, Swift

Programming – Working knowledge: Java, HTML/CSS, JavaScript, React Native, Docker, ProcessingJS, Vue.js, MySQL AI Tools – Proficient: Claude Code, Copilot, MCP Development