# Michael Wu

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#### **EDUCATION**

# Cornell University, College of Engineering

Ithaca, New York

Bachelor of Science in Computer Science

Expected May 2024

Bachelor of Science in Electrical and Computer Engineering

Relevant Coursework: Object Oriented Programming and Data Structures, Functional Programming, Discrete Structures, Data Science, Introduction to Algorithms, Machine Learning, Computer Architecture, Operating Systems, Stochastic Controls

### **EXPERIENCE**

Coinbase Remote

Software Engineering Intern

June 2023 – September 2023

- Optimized the PDF conversion speed for monthly statements of clients from HTML format reducing conversion time by an average of 80% for the institutional service Coinbase Prime on the Reporting and Monetization team
- Completed an intensive three-week boot camp learning about Coinbase technologies and cryptocurrency and finished a capstone project consisting of a watchlist that displays the movement of prices for cryptocurrencies of the user's choice
- Improved the reliability and user experience of Coinbase Prime through troubleshooting issues and improved the design based on internal and client feedback using TypeScript and React

Visa Foster City, California

Software Engineering Intern

May 2022 – August 2022

- Developed a web application that parses and analyzes logs from a Splunk database into human-readable information using Go under the Open VisaNet team by coding in proprietary intelligence and retrieving data from external APIs
- Created an interactive front-end providing filtering, color coding, and PDF conversion options using Go and HTML/CSS/ JavaScript from the translated data and provide additional annotations based on previously analyzed patterns
- Tailored tool from developer feedback saving over 90% of the time previously needed to interpret log data and spot errors

Cornell Mars Rover Ithaca, NY

Controls Electrical Subteam Member

November 2020 – Present

- Solder printed circuit boards (PCB) and test them for short circuits and malfunctions using numerous lab equipment
- Design printed circuit boards used to mount with other PCBs to provide wireless Controller Area Network communication to improve the reliability of communication and reduce time taken for debugging
- Write, edit, and document firmware for microcontrollers mounted on PCBs used to run brushless motors, water pumps, and LED lights and implement the Controller Area Network communication protocol using the C programming language

#### **PROJECTS**

#### Heads Up No Limit Texas Holdem Poker AI | Python

- Implemented a no limit Texas Holdem AI for one-versus-one play using the state-of-the-art reinforcement learning technique counterfactual regret minimization to develop optimal decision-making through self-training
- Constructed a poker game evaluator where the regret for each action is recursively calculated after every hand based on the current game state, alternative available actions, and the final outcome of the round

## Spotify Lyrics Translating Visualizer | JavaScript/HTML/CSS

- Developed a web application that connects to Spotify accounts and displays the lyrics of the songs currently playing with the option to translate the song lyrics to any language of choice using the Node.js and Express.js framework
- Displayed graphics on the web application that matched the tempo of the song by gathering data on the song playing

#### Piano Tile | Python/C

- Designed a reaction time game based on pressing a button every time a note in a song is played with a variety of song choices ranging in difficulty
- Interfaced the game with an FRDM-KL46Z microcontroller using UART communication protocol and utilizing hardware peripherals on the board such as timers and buttons

#### SKILLS AND AWARDS

Languages: Java, Python, Go, HTML, CSS, OCaml, JavaScript, C, Verilog

Tools: Git, Linux, Matplotlib, NumPy, Node.js, Pandas, Jira, Microsoft Office

Awards: Meinig Family Cornell National Scholar, Cornell Dean's List, Presidential Award for Volunteering Gold, National AP Scholar Interests: Poker, Soccer, Premier League, Stock Options, Table Tennis, Running