Ibiyemi Abiodun

<u>ibiyemiabiodun.com</u> • ibiyemi@intulon.com github.com/laptou

Brooklyn, NY

Education

Cornell University • Ithaca, NY

graduated May 2023

B.Sc. in Computer Science; B.Sc. in Electrical & Computer Engineering Neo Scholar; Rawlings Presidential Research Scholar

Experience

Open Source Engineer

Feb 2019 - present

- > Contributed bug fixes and new features to several open source projects in Rust and React Native
- > Developed <u>jsi-rs</u>, allowing high-performance native integration between Rust modules and React Native applications (*Rust, React Native, C++*)
- > Developed <u>bluez-rs</u>, a Rust wrapper for low-level Linux Bluetooth APIs (Rust, Linux)
- > Launched <u>ShareBRB</u>, a website where Cornell students share dining plans (*Node, React, TypeScript*)

Software Engineering Lead, Ditto.fyi (startup)

Jan 2023 - Aug 2023

- Pioneered custom tools for web scraping, data annotation, and indexing (Rust, Docker, AWS, Python, Grafana, Prometheus)
- > Authored federated backend for customizable social media sites (Rust, Docker, AWS, Postgres)
- > Designed and deployed cross-platform mobile app (React Native, TypeScript, Figma, Expo)

Full Stack Imaging Engineer, Cornell University Unmanned Air Systems

Oct 2019 - May 2023

- Developed mission-critical control software for cameras on unmanned aircraft (Rust, C++, Docker)
- Worked closely with a team of over 50 engineers and designers to bring unmanned aircraft to competition success
- > Created internal applicant tracking system, saving 100s of man-hours during fall recruitment (Node, React, TypeScript, Figma, Postgres, Prisma, Webpack)
- > Overhauled team website to reduce time required to push updates by 90% (Node, React, TypeScript)
- > Centralized critical documentation to aid in quickly onboarding new team members
- Maintained infrastructure including internal chat software, internal hardware and software documentation, <u>website</u>, CI/linting, and email server (*Node, React, Postgres, Nginx, Linux, Bash*)

Data Engineering Intern, Neeva

May 2022 - Aug 2022

> Improved indexing pipeline to detect ads in web pages and deliver enhanced search experiences by helping users block ad-heavy results (Go, Python, Apache Spark, Kubernetes)

Student Researcher, Cornell Future of Learning Lab

Mar 2020 - Nov 2021

> Created gamified computer science placement exam as part of a research experiment (Node, React, TypeScript, Python, Pandas, DataDog, Google Cloud / GCP, Webpack)

Full Stack Engineering Intern, Neeva

May 2021 - Aug 2021

Elevated personal search experience by adding filters (ex.: by author) and widgets to allow users to get more precise and immediate results (Go, TypeScript, React, Kubernetes, AWS)

STEP Intern, Google

May 2020 - Aug 2020

> Created a tool to import, analyze, and visualize listening history data from Spotify (TypeScript)

Projects

Spotify Codes scanner

Summer 2023

Devised a program capable of scanning Spotify Codes using a webcam or the Raspberry Pi Cam (Python, OpenCV, Rust)

whisper-rs Winter 2022

Adapted OpenAI's reference Python implementation of the Whisper speech-to-text model to Rust, resulting in improved speed, efficiency, and system integration (*Rust*, *PyTorch*, *C++*)

Coursework

Digital Systems Design Using Microcontrollers, ECE 4760

Fall 2022

> Created an RP2040-based "keyboard" where the input is the sound of an instrument (video) (C, C++)

Embedded Systems, CS 3420

Spring 2021

- > Produced a prototype real-time operating system for the STM32F4 (Rust, C)
- > Created a Tetris video game controller using the STM32F4 (Rust, C)

Microelectronics. ECE 3150

Spring 2021

Quantified behavior of low-level microelectronic devices (ex.: transistors) (*Tektronics oscilloscopes*)

Other Skills: Java (Android, server), Objective-C (iOS), Swift (iOS), OpenGL, Vulkan, GraphQL, Vue, C# Other Courses: Machine Learning, Computer Graphics, Embedded OS, Digital Logic, Algorithms