Subrat Shrestha

github.com/SubratShrestha | subrat.shrestha3@gmail.com | linkedin.com/in/subrat-shrestha

Education

University of New South Wales - *Bachelor of Computer Science*
August 2019 - August 2022

Relevant Coursework:

- COMP3900: Capstone Project   (96 HD)
- COMP3331: Computer Networks & Applications   (82 DN)
- COMP6080: Web Front-end Programming   (80 DN)

Skills

Languages: JavaScript, TypeScript, Python, C++, C, Java, Perl, HTML/CSS.
Tools/Frameworks: React, NextJS, tailwind, GraphQL, Cypress, AWS, Angular, FreeRTOS.

Work Experience

Software Engineering Intern - Earnr

February 2021 - August 2021

- Worked on the dashboard application for users to track investments in **React** (using **NextJS**) in **TypeScript**.
- Implemented a full-stack bonus code feature to solve a product migration issue by modifying the **DynamoDB** database, adding **GraphQL** queries, and creating the **React** components.
- Developed automated end-to-end tests for the frontend using **Cypress**.

Projects

NSW Freight Routing System
- Integrated the **Google Maps API** with several **NSW public transport APIs** to generate routes that meet specific freight requirements.
- Constructed the **React** frontend for route and user management.
- Implemented user-specific backend features in **Python** using **GraphQL** and **SQL.**

Neural Stimulator
- Designed the firmware and software (**C** and **Python**) for a wireless neural stimulator.
- Reduced power consumption by 40% by optimizing component selection and improving the use of sleep cycles.
- Implemented pulse generation and neural recording functionality using a DAC and ADC.
- Developed wireless communication functionality using Bluetooth Low Energy.

Student Societies

CSESoc Media:
- <u>Podcast with Dr. Gernot Heiser</u>: Talking to the John Lions Chair of Operating Systems about Operating Systems, Kernels, his company, and his work on the SeL4 microkernel.
- <u>Podcast with Vincey Au</u>: Talking to a data analyst from Canva about data analytics, analytics engineering, Canva, and how she got there.

Awards

Metlife Foundations Scholarship: for exceptional academic performance.