

Luke Banicevic

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❖ 0459-945-491 ❖ Sydney, NSW

EDUCATION

University of New South Wales (UNSW)

Feb. 2018 – Present

B.E Computer Science, B.E (Hons) Mechatronics Engineering

Kensington, Sydney

- Relevant coursework: Engineering Design 2 (HD) Programming Fundamentals (HD) Database Systems (HD) Object Oriented Design & Programming (D) Data Structures and Algorithms (D)
- Societies: UNSW Solar Racing Team Sunswift, UNSW Heroes Program, UNSW Chess Club

St. Pius X College

Feb. 2010 – Nov. 2017

High School Certificate

Chatswood, Sydney

- 2017 College Dux – 99.35 ATAR (top 1% of NSW)
- Medal for academic excellence
- Activities: Peer Mentoring, Snowy Hike, 3rds Basketball Team

WORK EXPERIENCE

Hyope

Dec. 2021 – Present

Cofounder/ Software Engineer

CBD, Sydney

- Built responsive React Native components written in TypeScript in the deployment of the company's multiplayer medieval pixel battle game Bliv.
- Designed client-side contact form using React and EmailJs for the company's main site supporting client requests.
- Coordinated with a team of engineers in weekly sprints to achieve business vision.

ResMed Pty Ltd

Dec. 2021 – Present

Software Engineer Intern – Devices

Bella Vista, Sydney

- Built a graphical user interface on top of pre-existing software to simulate the use of the ResMed AirSense 10 device, used by teams across the company.
- Troubleshooting existing defects and complex technological issues for various large-scale projects which affect customers globally.
- Enhancing application infrastructure to effectively fix bugs and optimize overall performance.
- Utilizing software engineering tools to develop products and services through the software development life cycle.

Coles Group

Aug. 2018 – Present

Customer Service Supervisor

Chatswood, Sydney

- Responsible for cash handling, cigarette sales, stock control, maintenance and delivering exemplary customer service.
- Effectively manage the Coles Service department.
- Successfully resolve customer conflict using strong interpersonal skills.
- Fulfilling work responsibilities while simultaneously working in a high-pressure environment.

UNSW Solar Racing Team – Sunswift Racing

Feb. 2020 – Dec. 2021

Embedded Software Engineer

Kensington, Sydney

- Embedded Systems developer responsible for the design of UNSW's Solar Car racing team Sunswift in collaboration with a multidisciplinary engineering team, competing in the 2021 Bridgestone World Solar Challenge.
- Designed and built an Autonomous Driving Assistance System using OpenCV computer vision library written in C++.
- Programmed CAN bus nodes interfaced with vehicle drive by wire systems. Programmed in C using extensive file dependencies, built, and loaded using Python.
- Responsible for coordinating sprint reviews, tracking team performance ensuring all project goals are met.

- Member of the Part 145 Maintenance Safety, Quality and Training Team at QantasLink, Qantas Airways' regional brand.
- Responsible for the design and implementation of software packages written in Visual Basic (VBA) computing language to automate paper-based tasks, increasing business unit efficiency and productivity.
- Consulted with internal and external stakeholders of QantasLink to ensure all personnel comply with CASA and AMO regulations.

PROJECTS

CAN Bus Drive Node

- LPC Embedded processor designed for critical drive control of UNSW Sunswift Racing's solar vehicle.
- Firmware engineered in C. Built and loaded onto embedded processor using command line utility written in Python.
- Relies on custom libraries, electronics debugging and troubleshooting.

Social Network Analyzer

- Command line program which analyses the structure of a social network using algorithms Breadth First Search, Dijkstra's Algorithm and Hierarchical Agglomerative Clustering
- Relies on data structures including Graphs, Priority Queues and Binary Search Trees.

Chess Web App

- Adaption on the classic chess game, designed in raw JavaScript.
- Manipulates DOM elements to output the app on top of a HTML grid element.
- Relies on both event handling, the use of objects and object-oriented design.

Invoice Automator

- Utility using the Google Calendar API and xlwriter Python library.
- Generates excel spreadsheet documenting invoice information including client names and session dates extracted from Google Calendar.
- Designed to automate workflow as programming tutor, saving myself 3 hours' worth of work per fortnight.

SKILLS & INTERESTS

Skills: C/C++; Python; Java; JavaScript, TypeScript, React, React Native; SQL; LaTeX; Git

Interests: Weightlifting; Space; Dungeons & Dragons; Chess; NBA