Luke Banicevic

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❖ 0459-945-491 ❖ Sydney, NSW

EDUCATION

University of New South Wales (UNSW)

Nov. 2023

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

Kensington, Sydney

- Relevant coursework: Engineering Design 2 (HD) Programming Fundamentals (HD) Data Structures and Algorithms (D)
 Linear Systems and Control (D) Computer System Fundamentals (D)
- Societies: UNSW Solar Racing Team Sunswift, UNSW Heroes Program, UNSW Chess Club

St. Pius X College 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

UNSW Solar Racing Team - Sunswift

Feb. 2020 - Present

Embedded Systems Developer

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.
- Programming 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.
- GitHub and Bitbucket used for version control.

Coles Group Aug. 2018 – Present

Service Team Acting Supervisor

Chatswood, Sydney

- Responsible for cash handling, cigarette sales, stock control, maintenance and delivering exemplary customer service.
- Effectively manage the Coles service department during closing shifts when required.
- Provide advice on consumer products and solutions to customer needs.
- Successfully resolve customer conflict using strong interpersonal skills.
- Fulfilling work responsibilities while simultaneously working in a high-pressure environment.

CodeSpace Education

Aug. 2020 – Jan. 2021

Programming Educator

Remote

- Responsible for teaching Primary and Secondary school students programming and engineering concepts including data types, functions and object-oriented programming using Roblox Studio and MCreator software platforms.
- Utilized HTML and CSS to teach basic web development concepts including user-centric functional specifications and design of websites.

Qantas Airways Limited - QantasLink

Apr. 2019 - Mar. 2020

Data Analyst

Mascot, Sydney

- 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.
- Responsible for the development of sub-committee packs for monthly presentation, including highlights such as data analytics and general business.

Apr. 2019 - Mar. 2020

Academic Tutor Northshore, Sydney

 Mentored four HSC students tutoring Mathematics, Physics and Chemistry, guiding them towards excellence during their HSC year.

 Directed weekly lessons, developed lesson plans, and liaised with families to provide the best possible tutoring experience for their children.

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 of 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; Python; Intelex; Microsoft Office; LaTeX; PowerBI; Visual Basic for Applications; HTML, CSS, JavaScript, Git
- Interests: Weightlifting; Space; Dungeons & Dragons; Chess; NBA

REFERENCES

Bonnie Boezeman A.O

Independent Mentor

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Craig Gillespie - QantasLink

Manager Safety, Quality & Training

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