# 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) Data Structures and Algorithms (D)
  Linear Systems and Control (D) Software Engineering Fundamentals (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**

## 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 customers.
- 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.
- Utilize 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

Maintenance Safety Quality and Training Intern

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.

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

#### REFERENCES

#### Bonnie Boezman A.O

Independent Mentor

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## Craig Gillespie - QantasLink

Manager Safety, Quality & Training

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