

EDUCATION

- **The University of Melbourne** Melbourne, Australia
Bachelor of Science, Data Science; WAM: 90.611 *February 2023 – Dec 2025*
- **Eden College Durban** Durban, South Africa
National Senior Certificate (South African Year 12); Aggregate: 95% *Jan 2018 – December 2022*

EXPERIENCE

- **Data Science Students' Society** Melbourne, Australia
IT Officer *January 2024 – Present*
 - **Intra-Club Collaboration:** Corresponded with a large IT team of students to maintain and develop web applications (for example) for the club.
- **Unilodge** Unilodge, Melbourne
Residential Advisor *June 2023 – December 2023*
 - **Organization:** Independently organized and facilitated 8 successful events for residents, fostering community engagement and collaboration.
 - **Public speaking and communication:** Collaborated with the organising of social events for residents. This often involved public speaking and communication with residents from a vast array of diverse backgrounds.
 - **Overnight Shifts:** Completed over 20 overnight shifts helping residents and staff at Unilodge Lincoln House

PROJECTS

- **Surround Sound:** [Surround Sound](#) is a web application made for CISSA Catalyst Hackathon in 2023 with a team of students. The app utilizes Artificial Intelligence and the spotify API to create a playlist based a combination of the context of the user (inputted via the means of a photograph of their surroundings), the user's mood and their music preferences. See also: DevPost submission [here](#).
- **In Bound:** [In Bound](#) is an on boarding software that allows team managers to create custom procedures for new team members. Managers can drag and drop relevant documents and information into the application, and our AI generates a chronological list of steps and to-dos. This ensures that new employees have a clear and structured path to follow, making their integration into the team seamless and efficient. In turn, employees also have the option to edit these procedures, allowing for a more collaborative and dynamic on boarding process.
- **Visual Word Embeddings:** [Visual Word Embeddings](#) is a fun visualization project that uses tensorflow embeddings to create and interactive, space-like 3D visualization. The project uses UMAP to reduce the dimensionality of the word embeddings, and then uses three.js to create an awesome looking plot. The project is designed to be interactive, allowing the user to rotate and zoom in on the plot as well as adding words to the plot to see how LLMs 'understand' the semantics of words. This serves as a fun introduction to LLMs and word embeddings for students, something that I was looking for when learning about them.
- **Traffic Sign Classification:** [Traffic Sign Classification](#) is a project that many machine learning techniques systematically for the task of classifying traffic signs from images, with a full report of my partner and my findings during the project. The project uses the German Traffic Sign Recognition Benchmark dataset, which contains over 50,000 images of traffic signs. This project was done as part of the Machine Learning course in my degree and was a great way to learn about the different techniques and algorithms used in machine learning.

SKILLS

- **Programming:** Python, Java, C, SQL, HTML, CSS, JavaScript, R, MATLAB, LaTeX, Pascal
- **Technologies:** Git, Docker, Jupyter, VSCode, PyCharm, IntelliJ, RStudio, Vercel, Firebase, MySQL, Node.js, TensorFlow, Keras, PyTorch, Scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, Plotly, BeautifulSoup, NLTK
- **Data-Driven Insights:** Proficient in using analytical and machine learning techniques to transform data into actionable insights.
- **Collaborative Teamwork:** Experienced in cross-functional collaboration within agile, dynamic environments to drive innovation.
- **Agile Project Leadership:** Skilled in managing multiple projects simultaneously, ensuring timely delivery through effective planning and adaptability.
- **Effective Communication:** Adept at articulating complex technical concepts to diverse audiences, enhancing both team alignment and stakeholder engagement.
- **Results-Oriented Execution:** Committed to continuous improvement and delivering measurable outcomes through strategic, data-informed decision-making.
- **Mathematically Minded:** Strong mathematical foundation, with a focus on statistics, probability, and linear algebra.