Resume - Daniel Parker

I am a recent graduate in **Mechanical Engineering** with a strong passion for robotics and automation. I enjoy solving real-world engineering problems and have hands-on experience through my involvement in a robotics competition and various engineering projects. My skills in programming, combined with my mechanical engineering knowledge, allow me to create innovative solutions.

EDUCATION

2019 – 2023
Bachelor of Engineering (Mechanical) - University of Melbourne, Melbourne, Australia.
Graduated with Honors.
GPA of 7.12/7; weighted average percentage of 84.5%.
Relevant knowledge and skill development:
• Applied mechanical engineering concepts through hands-on projects in robotics and automation.
• Strong background in thermodynamics, structural analysis, and CAD design.
• Developed programming skills in Python and MATLAB for engineering simulations.

2/2024–Present
Google Professional Certificate in Data Engineering (250 hours)
Currently completing a professional certificate focusing on data engineering and cloud computing. This course is enhancing my skills in data processing, building pipelines, and utilizing cloud infrastructure like Google Cloud and BigQuery.

RESEARCH PROJECTS

2023
Autonomous Robot Design for Warehouse Automation
I led a team of three in designing a fully autonomous robot capable of picking and placing items in a warehouse. We used **ROS** (Robot Operating System) for navigation, integrated a **camera** for object detection, and programmed the robot using Python. The project gave me significant experience with sensor integration, control systems, and machine learning for object recognition.

2022
Optimization of Heat Exchangers in HVAC Systems
Supervised by Dr. Laura Morrison, a professor of Mechanical Engineering, this project focused on improving the heat exchange efficiency in HVAC systems. I applied computational fluid dynamics (CFD) simulations and MATLAB for optimization, which resulted in a 15% improvement in system efficiency.