# NATHAN RAWIRI

## MECHANICAL & AEROSPACE ENGINEER

## CONTACT

📞 +61 433 963 608

✉ rawirinathan@gmail.com

## EDUCATION

**2021-2025**
**UNIVERSITY OF QUEENSLAND**

- BE(Hons) Mechanical and Aerospace Engineering
- GPA 5.6

**2019-2020**
**UNIVERSITY OF OTAGO**

- Undergraduate Computer Science & Economics

## SOFT SKILLS

- Communication
- Project Management
- Teamwork
- Socially Adept
- Problem Solving - MENSA IQ
- Critical Thinking
- Emotional Intelligence
- NZSIA Snowboard Instructor
- Half-Ironman Finisher (2023)

## CASUAL WORK

- Fishbowl - Salad Mixer
- O'Brian Group - Stadium Staff
- Uber Eats - Delivery Biker
- Fulton Hogan - Road Repairs
- Domino's - Delivery Driver

## PORTFOLIO

🌐 https://rawnatural.github.io

## TECHNICAL SKILLS

- **CAD and Simulation**: Siemens NX, Inventor, Simulink, FEA, CFD
- **Manufacturing**: Lathe, Mill, Press Brake, CNC, Laser Cutter, Bandsaw
- **Software**: Python, PHP, MySQL, C++, Solidity (blockchain), iOS Swift

## WORK EXPERIENCE

**Siemens Mobility**                                      2023
Project Engineer

- Managed Complex $50m Railway Signalling Project in Wellington, NZ
- Replaced mechanical interlocking system with Westrace MkII & ETCS.
- Generated installation location requirements for 168 Axle Counters.
- Aligned bill of materials with designs and procurement.
- Procured $millions of signalling equipment before long lead-times.
- Chaired meetings and organised professional engineering team.
- Lead Project Engineer for close-out of post-commisioned project.

**UQ Space**                                             2021- 2025
Aerostructures Engineer

- Develop Rockets and Rovers, representing UQ at competitions.
- Lead Manufacturer of composite airframes and aluminium rover.
- Fibreglass/epoxy layups vacuum bagged on mandrels and moulds.
- $1^{st}$ place in 5000ft category at AURC 2025.
- Deputy Project Lead for $2^{nd}$ place in Australian Rover Challenge 2025
- Extra-Curricular professional engineering teamwork experience.

**Software Developer**                                   2019-Present
Self Employed

- Full-Stack website development - PHP, JS, HTML, CSS, MySQL
- Engineering Solution Optimisation - Python, C++
- Blockchain development - Solidity smart contracts - web3 integration
- iOS app development - Swift
- https://github.com/RawNatural

**Manufacturing Supervisor**                             2025
UQ Innovate

- Innovate is the makerspace facility at UQ equipped with advanced manufacturing tools such as lathes, mills, 3D printers and laser cutters
- Offer technical support and ensure safe operation of machinery/tools

## REFERENCE

**Mark Kilby**
Siemens Head of Project, Systems and Specialty Engineering
**Phone:**   +64 22 017 2014
**Email :**   mark.kilby@siemens.com

**Oliver Pettingill**
UQ Space Aerostructures Lead
Mercedes AMG Powertrain Engineer
**Email :**
Oliver.pettingill01@mercedes-amg-hpp.com