

SUMMARY

Versatile software and mechatronics engineer with a strong problem-solving mindset. Experienced in Python-based test automation and verification, with additional exposure to web development through academic projects. Eager to further develop my skills in software development.

EXPERIENCE

ASSOCIATE SYSTEMS ENGINEER, ENPHASE ENERGY

February 2024 - Present

- Developed and maintained Python-based test automation, including script writing, debugging, and team code reviews
- Performed system design verification through both manual and automated testing
- Develop 20+ automation test cases, improving test efficiency and reliability
- Ensured compliance with requirements, industry standards, and internal processes
- Built custom tools to streamline workflows and enhance productivity
- Introduced best practices and standardised templates to improve code quality and consistency

WEBSITE DEVELOPMENT, CONTRACT

2018 - Present

- Created websites using Wix, Squarespace and Shopify tailored to clients needs
- Example: <https://www.denisewilson.co.nz/>

MECHANICAL ENGINEERING INTERN, JACOBS

November 2023 - February 2024

- HVAC calculations (Camel)
- Building service electrical calculations
- Created multiple calculation tools (Excel and VBA)

RESEARCH TECHNICIAN, APPLIED RESEARCH SERVICES – NOV 2022 - FEB 2023

- Testing of consumer products using data analysis and sensors.
- Project to design and manufacture a fan lifter mechanism (problem-solving and "real world" experience with sole charge of the project from conceptual design, planning, and development to completion).

PROJECTS

- Final Year Project – distributed energy monitoring and scoring system for a national electric racing competition for EVelocity (EVoScore) - **full stack web development (Firebase, Next.js, Typescript)**
- Wacky Racers – controlled car using an accelerometer in a hat - **PCB design**
- Underwater hockey 'flick' joint tracking using computer vision, **python and OpenCV**
- Other Languages: C, VHDL, PLC, Ladder Logic, Matlab

EDUCATION

Bachelor of Engineering in Mechatronics with First Class Honours

University of Canterbury - Graduated 2023

PROFESSIONAL SKILLS

- Problem Solving
- Communication
- Leadership
- Fast Learner

TECHNICAL SKILLS

- Next.js
- Typescript
- Python
- C
- Firebase

LINKS

Github

<https://github.com/Zoe-Sharp>

Portfolio

<https://zoe-sharp-portfolio.vercel.app/>

ACHIEVEMENTS AND AWARDS

- Rotary Youth Leadership Awards (Awardee) – 2023
- Jacobs Engineering NZ Scholarship – 2022
- UC Emerging Leaders Scholarship and Development Program – 2020
- UC Excellence Endorsement Scholarship – 2020
- Head Student (Academic Captain) – Nelson College for Girls – 2019

EXTRA-CURRICULAR

- Operations/Treasurer - *Women in Engineering Christchurch* (February 2024 - Present)
- Vice President/3rd Year Rep - *UC Women in Engineering Executive* (2022-2023)
- Rotary National science and Technology Forum Advisor - 2019-2021
- UC Women in Engineering Mentor - 2024 - Present

OTHER INTERESTS

I enjoy getting in the outdoors, to ski, mountain bike or hike. I also love to play the bass and guitar.

REFERENCES

Available on request.