Phrommin Phiansamoe

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PROFESSIONAL SUMMARY

Motivated and hands-on biomedical/mechanical engineer with strong technical acumen in medical device testing, field support, and compliance. Proven ability to integrate, troubleshoot, and maintain life-saving equipment across cross-functional environments. Experienced in IEC 61439-1, ISO 13485, V&V, FMEA, and collaborative problem solving in regulated settings. Passionate about improving patient outcomes and supporting frontline teams.

TECHNICAL SKILLS

- Medical Device Testing | ISO 13485 | IEC 61439-1 | GMP | Root Cause Analysis | V&V | FMEA
- SolidWorks | MATLAB | Python | C++ (Arduino) | JavaScript | MS Office | G-Code | Agile Principles
- Languages: Thai (Native), English (Fluent, PTE 84), Laotian (Proficient)

WORK EXPERIENCE

FUJI SMBE HARWAL SYDNEY, NSW
Testing Engineer May 2024 – Present

- Conducted general and functional testing on 2 PDCs daily, ensuring compliance with quality and standard (IEC 61439-1) before dispatch.
- Co-developed a solution for insufficient earth resistance on exposed studs, reducing related design errors by 80%.
- Maintained defect logs, supporting continuous improvement and measurable gains in production quality and accountability.

JACARANDA FLAME CONSULTING SYDNEY, NSW
Consultant Intern June 2023 – August 2023

- Performed feasibility studies and standard comparisons (Eurocode, ACI318, NZS3100) using MATLAB.
- Led route planning analysis using geospatial tools for infrastructure optimisation.
- Presented findings and solutions to clients, demonstrating technical leadership and clarity.

UNIVERSITY OF CANTERBURY CHRISTCHURCH, NEW ZEALAND
Researcher Intern Nov 2019 – Feb 2020

- Led mechanical design of a multi-bio ink 3D bioprinter in a 3-person team, using SolidWorks and 3D printing 90% of the structure for sustainability and adaptability within 8–10 weeks.
- Developed an open-source bioprinter platform, enabling future enhancements and broader research.
- Delivered a functional prototype, showcasing innovation, collaboration, and potential for future development.

PROJECTS

SOFT ROBOTIC ENCLOSURE FOR CHILDREN WITH CEREBRAL PALSY SYDNEY, NSW
Master's Thesis 2023

- Designed a compact, lightweight assistive enclosure for children with cerebral palsy.
- Conducted field testing with 10+ families and clinicians, iterating based on user feedback.
- Reduced enclosure size by 30% via CAD modelling and optimised for paediatric usability.

WINGLET OPTIMISATION CHRISTCHURCH, NEW ZEALAND
Bachelor's Final Year Project 2020

- Designed and tested multiple winglet configurations using SolidWorks and MATLAB.
- Conducted wind tunnel testing and analysed aerodynamic performance using real-world data.

EDUCATION & OTHER

UNIVERSITY OF SYDNEY SYDNEY, NSW
Master of Professional Engineering, Biomedical Engineering *September, 2024*

- WAM: 79.3 while working 16-20 hours
- SUABE Biomedical Club Member

UNIVERSITY OF CANTERBURY CHRISTCHURCH, NEW ZEALAND
Bachelor of Engineering with Honours, Mechanical Engineering *April, 2021*

- GPA: 7.31/9, DUX Excellent Student Scholarship Recipient (2017)

INTERESTS: Basketball (Two Times Most Improved Player Winner), 3D Printing, Design, Quality