

DHRUV SHARMA

+61 466 073 466 | meetdhruv.23@gmail.com | linkedin.com/in/ds23med | github.com/ds23code

EDUCATION

University of New South Wales <i>Bachelor of Engineering (Bioinformatics) Honours & Master of Engineering (Biomedical)</i>	Sydney, Australia <i>Jan 2023 – Dec 2027</i>
• WAM: 74 Relevant Coursework: Bioinformatics, Machine Learning, Computational Biology, Software Design, Statistics	

TECHNICAL PROJECTS

JAIME Accessible AI Education Platform <i>Python, Twilio API, Flask 1st Prize – UNSW Societal Impact of AI Symposium</i>	Sept 2025 – Oct 2025
• Built phone-based AI tutor compatible with basic feature phones (Nokia 3310) using Twilio for voice interaction	
ROOTS AI Genetic Risk Assessment Tool <i>Python, Streamlit, OpenAI API, Matplotlib Supervised by Prof. Andreas Zankl, USYD</i>	July 2025 – Aug 2025
• Developed web platform for genetic counsellors to visualise family medical history and identify hereditary disease patterns	
NeuroHawk Emergency Detection Helmet <i>C++, Arduino UNSW Buildathon</i>	Feb 2025 – May 2025
• Integrated Mondo Disease Ontology for standardised classification; used OpenAI API to extract structured entities from free-text family histories	
• Built automated pedigree chart generation and risk summary reports; reduced manual data entry time by approximately 60%	
Poseidon Water Quality Monitoring Boat <i>Python, LoRaWAN, Raspberry Pi, SolidWorks 3rd Place & People's Choice – UNSW Buildathon</i>	June 2024 – Aug 2024
• Led 6-person team to design and build autonomous boat; used SolidWorks to model hull and generate laser-cut components	
• Integrated pH, turbidity, temperature, and dissolved oxygen sensors; collected 1,000+ datapoints across Sydney waterways	
• Implemented LoRaWAN communication for 2km range with real-time data visualization dashboard	

EXPERIENCE

Academic Tutor <i>Tutero & Matrix Education</i>	Aug 2023 – Present <i>Sydney, Australia</i>
• Tutor 100+ Year 7–12 students individually and in small-group classes across mathematics and science subjects	
Events Director <i>UNSW Bioinformatics Society</i>	Jan 2025 – Present <i>Sydney, Australia</i>
• Lead planning and execution of 5+ events per semester including technical workshops and networking nights (100–200 attendees)	
Student Ambassador & SAP Leader <i>UNSW Engineering</i>	June 2024 – Present <i>Sydney, Australia</i>
• Organise Q&A panels with researchers from Garvan Institute, Children's Cancer Institute, and Commonwealth Bank	
Campus Ambassador <i>Notion</i>	Sept 2023 – Present <i>Sydney, Australia</i>
• Meet regularly with course faculty to provide student feedback on curriculum and cohort sentiment; contributed to course improvements	
• Awarded SAP Leader Award (2024) for contributions to student experience and faculty collaboration	

TECHNICAL SKILLS

Languages: Python, C/C++, R, MATLAB, JavaScript/TypeScript, Bash
Data Science & ML: NumPy, Pandas, Scikit-learn, Matplotlib, TensorFlow, Jupyter
Bioinformatics: RStudio, Bioconductor, BLAST, PyMol, Galaxy, sequence alignment, variant analysis tools
Web & Databases: React, Flask, Streamlit, MongoDB, REST APIs
Hardware & CAD: Arduino, Raspberry Pi, SolidWorks, embedded C++, GPS/GSM modules
Tools: Git, Linux, Docker, LaTeX

SELECTED AWARDS

1st Prize, UNSW Societal Impact of AI Symposium (2025) 3rd Place & People's Choice, UNSW Buildathon (2024)
People's Choice Award, UNSW Innovator's Pro Pitch Fest (2024) SAP Leader Award, UNSW Engineering (2024)