



SARAH BATTENALLY

UNDERGRADUATE MECHATRONICS
ENGINEER / MARINE TECHNICIAN
/ DEFENCE INNOVATOR



CONTACT

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TECHNICAL SKILLS

Royal Australian Navy (RAN)
Leading Seaman Marine
Technician (LSMT) with 14
years of service. I am now a
UTS engineering
undergraduate in
mechatronics, gaining
technical skills in:

- SolidWorks
- ANSYS Workbench
- Additive Manufacturing
- Laser Cutting/Water Jet
- Hardware & Robotics
- Rapid Prototyping
- Arduino programming
- Field Programmable Gate Array - Quartus Prime
- C Language Programming

Current Weighted Average
Mark (WAM): 80.39 & GPA: 6

CURRENT POSITION

Intern Mechatronics Engineer

After a successful RAN career as a specialist technician with operational service and Navy in industry secondment experiences, I am now changing the direction of my service to focus on robotics and automation.

I look forward to a long and diverse career supporting naval robotic operations for the future success of Australia's maritime security, naval warfare and industrial capability.

I aim to acquire research and industry-led mechatronic experiences in supporting expert teams to provide AUV capabilities to the Navy. Determined to carry these valued experiences with me into a future engineering career and robotics collaboration roles in the RAN.

QUALIFICATIONS

- AGSVA maintained Security Profile
- Certificate IV in Engineering - MEM40105
- Certificate III in Maritime Operations - MAR30813
- Work Health and Safety for Defence
- RAN Propulsion Maintenance Specialist
- ADF Cyber Security Awareness Proficiencies
- ADF Basic Life Support and First Aid Training
- Trade Supervisor and Trades Training Coordinator
- Action Stations Supervisor in the Maritime Military Operational Environment

Above is a condensed summary of my current qualifications.

A comprehensive RAN list of assessed competencies, proficiencies, honours, awards and ADF-awarded achievements can be supplied on request.

ENGINEERING EXPERIENCE

Mechtronics Intern Anduril Australia Jan - July 2023 *Navy Mechatronics Engineer of Ghosts.*

Recently completed the UTS Diploma in Professional Practice deployed in the Navy Ghost Shark Program with DSTG and Anduril Australia. Contributing to the interdisciplinarity mission team to design, build and deploy the RAN's future multi-teaming air, surface and subsurface robotic capabilities. Employed as the first-ever Australian intern and embedded service member at Anduril Australia, in my first month achieving the DIVE-LD surrogate AUV Factory Acceptance Trials and designed unseen navigation systems that contributed to the success of Exercise Autonomous Warrior 2023. Proud to engineer system-level mechanical architecture suited to the Australian subsea environments that will be included in the Hull01 platform delivery XL-AUV Ghost shark in 2023.

Research Engineer UTS ProtoSpace 2020 - 2022 *Student intern mechatronic and prototype engineer for Australia's most advanced Additive Manufacturing facility.*

Completed a segmented three-month Navy-sponsored Engineering Work Experience position in Engineering R&D, supporting UTS's additive and advanced manufacturing workshops. Collaborating with multidisciplinary experts at the ProtoSpace and Tech Lab precincts, I assisted in providing next-gen rapid prototyping and manufacturing technologies to UTS and Australia. Achieving an ambitious personal goal of becoming a facilitator of 2021 and 2022 Additive Manufacturing PrintJAM Hackathons for students, academe and industry members, and proud to support the program's success as the Winner of the inaugural 2020 Hackathon.

Undergraduate Engineer Commencing 2020 - 2024 *Bachelor of Engineering (honours), including a Diploma in Professional Engineering Practice. Majoring in Mechatronic Engineering.*

Through my undergraduate studies, I have demonstrated the ability to provide the Navy with capability while building and maintaining productive working relationships across integrated engineering employment positions.

- Scooped the Chief of Navy's Innovation Excellence Award
- Published and presented at the Civil Defence and International Maritime Conferences (IndoPac 2022).
- Successfully filled one PCT patent with a clear IPRP, filled an additional provisional, and translated it into a second PCT.
- Won The Best Pitch Award at the Australian Defence Science, Technology and Research Summit (ADSTAR 2022).
- Finalist in the 2022 Innovation Australia Awards for Excellence in Defence-related sovereign capability.
- Contributor to the 2022 National Innovation Policy Forum

HONOURS & AWARDS

- AFGHANISTAN MEDAL
- AUSTRALIAN ACTIVE SERVICE MEDAL WITH ICAT CLASP
- AUSTRALIAN DEFENCE MEDAL
- NAVY COMMENDATION - GOLD
- COMMANDING OFFICER COMMENDATION
- OFFICER CANDIDATE SCHOLARSHIP
- CONTRIBUTOR TO NAVY INNOVATION 2018
- TELSTRA YOUNG BUSINESS WOMEN'S AWARD NSW FINALIST 2017
- ADF PARLIAMENTARY EXCHANGE PROGRAM 2017
- DEFENCE WORK EXPERIENCE PROGRAM - MENTOR 2017-2018
- LEAN SIX SIGMA - YELLOW BELT 2017
- CDF LEADERSHIP FORUM - CONTRIBUTION AWARD 2017
- AUSTRALIAN WOMEN'S LEADERSHIP SYMPOSIUM 2016
- TICKFORD - TEAM NAVY V8 SUPERCARS ENGINE BUILDER + PITSTOP MECHANIC 12-MONTH SECONDMENT 2015
- DUX - DIESEL ADVANCED SKILLS, TECHNICAL TRADE
- ITT - STUDENT MERIT & LEADING TRAINEE

RAN OFFICER CANDIDATE EMPLOYMENT REQUIRMENTS

Gain industry experience as a professional engineer while achieving a bachelor's level education meeting RAN requirements to Commission as a Naval Marine Engineer Officer in 2024.

Fulfil Navy employment through university sessions and extended breaks, supporting the fleet, assisting in shipbuilding and sustainment sectors. From system specification, certification and machinery trials to acquisition and through-life-cycle support.

To develop greater technical and leadership abilities and assist the future of Navy capability. Prepare to support ADF engineering as our most advanced Warships, Tanks and Aircraft enter service.

Engage with our people and partners to leverage technology to contribute to the future of maritime security and naval warfare.