Position Description – Technical Officer (Maritime Autonomy)

Updated 04/11/2024

POSITION DETAILS	
College/Portfolio	***College of Science and Engineering***
Organisational Unit	***Centre for Defence Engineering Research and Training (CDERT)***
Supervisor (Title)	***Director, Maritime Autonomy Section, CDERT***
Classification	***Higher Education Officer Level 6***
Employment Type	***Fixed-term, Full-time***

POSITION SUMMARY

The Centre for Defence Engineering Research and Training (CDERT) at Flinders University specialises in the development of autonomy capabilities for uncrewed surface and underwater vehicles. Under the general to broad direction from the Director - Maritime Autonomy Section, CDERT, the Technical Officer (TO) will be responsible for supporting laboratory operations and research activities associated with the Maritime Autonomy Section. The TO will work collaboratively within a team environment with a range of internal and external stakeholders to deliver sound engineering solutions and services in support of the research team. These services will include the design, construction, commissioning and maintenance of specialist equipment and facilities. The TO will additionally be responsible for preparing equipment documentation, providing advice and instruction, coordinating and participating in sea trials, and asset lifecycle management.

UNIVERSITY EXPECTATIONS AND VALUES

All staff at Flinders are responsible for understanding their obligations and responsibilities as set out in the University's code of conduct and are expected to:

- demonstrate commitment to the University's values of Integrity, Courage, Innovation, Excellence, and the underlying ethos of being Student Centred;
- contribute to the efficient and effective functioning of the team or work unit to meet the University's objectives. This includes demonstrating appropriate and professional workplace behaviours, providing assistance to team members, if required, and undertaking other key responsibilities or activities as directed by one's supervisor;
- promote and support an inclusive workplace culture which values diversity and embraces the principles of equal opportunity;
- perform their responsibilities in a manner which reflects and responds to continuous improvement; and
- familiarise themselves and comply with the University's *Work Health and Safety (WHS), Injury Management and Equal Opportunity* policies.

KEY POSITION RESPONSIBILITIES

The Technical Officer is accountable for:

- *Designing, constructing, testing and commissioning specialised robotic equipment and embedded systems for maritime applications using engineering tools to specifications developed in collaboration with stakeholders.*
- *Carrying out repairs, maintenance and calibration to commercial & in-house constructed laboratory equipment.*
- *Performing administrative functions including preparing technical documentation, keeping maintenance records, administering WHS policies, and preparing WHS compliance related documentation.*
- *Working collaboratively with external stakeholders and internal team members.*
- *Liaising with outside organisations and contractors on complex technical matters.*
- *Assisting the Research Team to successfully deliver project milestones and Key Performance Indicators.*
- *Contributing to coordinating, planning and executing the project tasks required to collaborate with industry partners.*
- *Participating in sea trials and assisting with the organisation of such activities, as required.*
- *Assisting supervisors with supervision of postgraduate, honours and intern students, where involved.*
- *Some out of hours work (including weekends) as well as rural SA, interstate and overseas travel, may be required.*
- *Any other responsibilities in line with the level of the position as assigned by the Supervisor and/or the University.*

A successful candidate is required to be:

- *An Australian Citizen, eligible to gain an Australian Defence Clearance and meet International Traffic in Arms Regulations (ITAR); Citizens of Five Eyes countries may also be considered;*
- *Be eligible to attain and maintain, an Australian Security clearance level NV1 as determined under the Australian Government Protective Security Policy Framework (PSPF).*
- *Ability to provide a National Police Clearance obtained within the last 3 months;*

KEY POSITION CAPABILITIES

- *Degree qualification in Robotics/Mechatronics/Electronics Engineering with relevant experience.*
- *Proven understanding of design competency and safety in design.*
- *Experience in designing complex and innovative electronic and mechanical systems using appropriate CAD tools realised through in-house and external manufacturing processes.*
- *Experience developing robotic and embedded systems using ROS/ROS2, Python, C/C++.*
- *Well-developed analytical skills together with the capacity to assess, understand, exercise technical judgment and communicate complex technical matters in a clear accurate manner.*
- *Well-developed interpersonal skills and the ability to liaise effectively with a wide range of people, including excellent written and verbal communication skills.*
- *Project leadership, scoping and planning skills.*
- *Demonstrated ability to apply initiative, judgement and prioritisation in a busy team environment.*
- *Experience working in a managed Workplace Health and Safety environment.*
- *Mechanical trade skills (desirable).*
- *Experience working in a multidisciplinary team (desirable).*