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## SENIOR SOFTWARE ENGINEER

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**POSITION:** Senior Software Engineer

**FUNCTION TEAM:** Engineering

**LOCATION:** Randwick, NSW.

### The Company

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Ocius Technology is an Australian company that builds autonomous Uncrewed Surface Vessels (USVs). These USVs use the energy of the weather - sun, wind, and waves, to act as persistent monitoring and communications platforms. We are embarking on an ambitious program of building and deploying multiple USVs for operations around Australia and beyond.

### The Function

The team is responsible for collaborating to **design, build, and maintain software applications**. These team members work in unison, bringing together diverse talents and expertise to achieve a common goal: the development of high-quality software for the delivery of world class autonomous vessels.

### The Role

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As a result of growth, we have opportunity for a senior software engineer to work in a team to build software architecture, monitor and test software and upgrade existing systems. The role will develop software solutions and handle the development and maintenance of software applications.

### Key Responsibilities

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#### Software Design and Development

- Staying abreast of contemporary concepts within the software development industry.
- Engaging in product development and brainstorming with team members.
- Apply the company's software development policies and culture among employees.
- Interact with product management to obtain and understand requirements and deliverables and develop test plans.
- Software design, development, integration, and validation for autonomous vehicle control, device management, navigation, communications, and related applications.
- Researching and developing various software solutions by consulting with users, investigating problem areas and adhering to the SDLC
- Ensure software is scalable and maintainable to support the next generation of autonomous systems.
- Conducting system analysis and recommending changes in technical processes to improve software operations

#### Collaborating with teams to deliver sophisticated engineering outcomes

- Collaborate with cross-functional, multi-disciplinary teams to develop innovative solutions in defence technology.
- Developing and designing an existing portfolio of applications and services.
- On occasion, participate in remote watchkeeping of the USVs when at sea.
- Compiling, analysing and summarising information regarding development and service issues

#### Leadership



- As a senior member of the team, create a culture of safety, customer centred so that Ocius delivers on the mission.
- Contribute to the establishment and growth of the software team. Provide mentorship and coaching to software engineers to ensure they understand the organisational processes and technologies.
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## Demonstrated Experience

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### Advanced Technical Proficiency

- As a senior software engineer, deep technical expertise is essential. This includes mastery of programming languages, frameworks, and tools relevant to your domain.
- A strong understanding of data structures, algorithms, and software architecture principles is crucial for designing scalable and efficient solutions.
- C++/JavaScript/Python development experience.
- Demonstrated ability to develop on Linux, Windows, and embedded systems.
- Willing to learn diverse technologies and codebases on the job (Ardupilot, AWS, CAN, javascript, devops etc).
- Experience working with autonomous vehicles and real-time systems and mission-critical applications.
- Bachelor's degree in computer science or engineering.

### Problem Solving, Critical Thinking and Evaluation

- Ability to communicate effectively with team members, stakeholders, and clients.
- Ability to convey complex technical concepts in a clear and concise manner, facilitate productive discussions, and resolve conflicts.
- Working in a degree of independence while managing diverse problems that require critical thinking and problem solving before making decisions.
- Evaluate the outcomes and impacts of solutions and record lessons learned.

### Leadership and Mentorship

- Demonstrated experience leading, supporting and or mentoring team members.
- Effective communication, collaboration, and the ability to mentor others are crucial skills
- Capable of providing constructive feedback, sharing knowledge, and fostering a positive and productive work environment
- Ability to work well in a fast-paced and dynamic environment where initiative is required for success.

### Research, Innovation and Continuous Improvement

- Evaluate and own the impacts of the design and take ownership for improvements.
- Develop safe and sustainable solutions.
- In adherence to legal and ethical considerations, make decisions in collaboration with stakeholders and team members.

### Project Management and Time Management

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- Often working on complex projects with multiple stakeholders, deadlines, and competing priorities. proficiency in project management, estimate project timelines, allocate resources efficiently, and adapt to changing requirements.

### **Essential Requirements**

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- Australian Citizen.
- Ability to obtain and maintain a minimum of Defence Security Clearance–NV1.