T +61 2 9924 6400 **F** +61 2 9924 6401 E admin@ocius.com.au W www.ocius.com.au

SEILS Lab SMART Building University of Wollongong Northfields Avenue. Wollongong, NSW 2522.

All correspondence to PO Box 4304 Castlecrag 2068 **NSW** Australia



Ocius Technology Ltd is building unmanned ocean drones so that scientists, industry and defence personnel doing ocean monitoring and surveillance can save money, reduce error rates, give 365/24/7 coverage and remove people from harms way.

Please see website or video https://www.youtube.com/watch?v=41KU55oGe0M

Ocius Embedded Systems Engineer - job description

Characteristics:

- Ocean sailing and sea experience
- Commercial embedded systems, IT/software/ programming experience
- Maturity to work with and mentor mechatronics students
- Ability to liaise with and universities, government and management
- A passion for drones/autonomous systems
- Ability to obtain Defence clearance
- 2 year contract with work initially at University of Wollongong then probably in Sydney
- Start November 2015
- wage commensurate with skills

Skills:

- * Commercial experience Embedded systems engineering and design:
- * Competent in electronic design work -part selection, schematic design and sourcing
- * Competent in production PCB design and layout, manufacture & testing
- * Competent embedded systems programmer- Expert in C,C++,C#
- * Competent in Linux both embedded distributions and standard Debian/CentOS distributions
- * Competent in shell scripting
- * Must have a strong knowledge of embedded systems communications protocols -SPI,I2C,UART,RS232,RS422,TIA-485,CAN,MDIO,Ethernet
- * Knowledge of networking protocols such as TCP/IP and Ethernet required.
- * Strong investigatory and debugging skills
- * Experience developing system level software in Linux & Windows development environment.
- * Hands on experience with multi-threaded architectures, thread management, latency and throughput optimization.
- * Knowledge of custom linux drivers on ARM platform
- * Extensive experience in Software Quality Assurance, including reviewing test plans, write test scripts, and validation of software products.
- * Solid background in data structures and algorithms.
- * Experience developing software for networking protocols including TCP/IP and

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Ethernet protocols.

- * Understand complex issues in software modularity, performance bottlenecks, etc.
- * Experience contributing at all stages of software development life-cycle.
- * Must be familiar with mobile communications systems (Radio, GSM, Satellite)
- * Familiarity with Mercurial/Git Version control
- * Familiarity with CAN based communications subsystems in harsh environments
- * Must be able to provide design work documentation and manuals.
- * Minimum of 5 years industry experience in C/C++, Minimum of 3 years embedded systems C/C++ experience.
- * Familiar with SQL server and data management
- * Preference familiarity with the STM line of embedded microcontrollers.
- * Experience working with web protocols, eg SOAP, REST interfaces.
- * Preference for "ARM Accredited MCU Engineer" certification.