



CSIRO Student Research Internships in Emerging Robotics Technologies

The CSIRO Robotics and Autonomous Systems Group are offering research internships for MSc-level students in **Soft robotics, Robotic Machine learning, Mechatronics, Modelling, and Control**. In collaboration with the Robotics and Intelligent Systems group at UiO.

Who we are

CSIRO, the “Commonwealth Scientific and Industrial Research Organisation”, are Australia’s national research institution, and the government’s trusted scientific advisors.

Data61 are the computing and information technology arm of CSIRO.

Based in Brisbane, Australia, Data61’s **Robotics and Autonomous Systems Group** is one of the leading robotics research groups in the world. It works closely with CSIRO’s **Active Integrated Matter Future Science Platform** to investigate the cutting edge of robotics technologies.

Student Internships

We are looking for highly-motivated MSc students who want to get **hands-on** with the latest technology! We have research projects from 8 months upwards, to provide new capabilities in the following areas:

UAV machine learning – Teach a UAV to fly; use machine learning to develop instrumentation and control for a hybrid UAV that can roll on the ground or fly in the air.

Soft robotics modelling and control – Develop techniques to help us use novel sensory packages to understand, model, and learn closed-loop control for compliant soft robots

3D printing of bespoke robotic components – Use our powerful high-performance compute clusters to generate environment-specific robot morphologies, using evolutionary algorithms. Use our multi-material 3D printer to make the results a reality.

Sim-to-real learning of robot morphology – Create a test rig for hexapod robots, and use inject real-world data into our simulator to improve the transferability of our robots from simulation to reality.

What we offer

CSIRO will provide **stipend** for living costs, an **amazing research opportunity** in a **world class research team**. CSIRO have **fruitful research relationships** with many universities, and there will typically be 4-5 other students undertaking similar projects in our lab. Brisbane is a winning combination of amazing weather, busy nightlife and closeness to nature, and is perfectly suited for a variety of lifestyles – including surfing – you name it, we have it!

Contact

To express interest in these projects, or if you require further information, please contact Kyrre Glette at the ROBIN group (kyrrehg@ifi.uio.no) or directly with Dr David Howard at David.Howard@csiro.au. Selection of candidates will be based on profile and motivation interviews.

