PhD Opportunity at the Universitat de Girona – Machine Learning for Underwater Robotic Manipulation

The **University of Girona (UdG)** is offering a **PhD position** within the research group <u>ViCoRob</u> (Computer Vision and Robotics). ViCoRob combines top-level research with technology transfer. Over the past ten years, more than 30 PhD students have graduated from the group.

The successful candidate will join the **Underwater Robotics Research Center (CIRS)**, working on cutting-edge projects to develop **learning-based algorithms for autonomous manipulation**. The challenge: enabling an autonomous underwater robot equipped with one or two manipulators to perform complex manipulation tasks in real-world scenarios.

Requirements

Applicants must have:

- A total of 300 ECTS (including at least 60 at the master's level), preferably in computer science, robotics, AI, mechatronics, or related disciplines
- Strong skills in Python and C++
- Solid background in machine learning, including popular libraries such as PyTorch
- Fluency in English, both oral and written

Highly valued experience on:

- Robotics (mobile robots and/or manipulators)
- Reinforcement learning and/or imitation learning skills
- Frameworks such as ROS and simulators like MuJoCo or IsaacSim

Conditions

- Full-time contract (37.5 h/week) for three years, renewable annually based on performance
- Salary: €18,180.48 (1st and 2nd years), €19,479.12 (3rd year), following UdG regulations
- Workplace: onsite at the CIRS facilities in Girona (Spain)
- Expected **starting date**: January 1, 2026

Application

Candidates must apply by completing the **application form** (<u>LINK</u>) and submitting the required documents **by 30/09/2025**. The selection process will also include:

- An online interview
- A knowledge test covering English, programming, and general knowledge in areas such as machine learning or robotics.

Dr. Narcís Palomeras, Coordinator of the Erasmus Mundus Master in Intelligent Field Robotic Systems Universitat de Girona