

OPEN POSITION: A PhD position at the Laboratory for Underwater Systems and Technologies (LABUST)

SUPERVISOR:

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University of Zagreb, Faculty of Electrical Engineering and Computing

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LOCATION:

Laboratory for Underwater Systems and Technologies (<http://labust.fer.hr/>)

University of Zagreb, Faculty of Electrical Engineering and Computing (<http://www.fer.unizg.hr/>)

Zagreb, Croatia

DESCRIPTION:

The successful candidate will work on sonar image processing. The proposed research will involve research in advanced signal processing and deep learning with emphasis on autonomous identification of sonar detected objects from various perspectives in real-time. The developed algorithms will be applied on underwater object detection and identification, as well as algorithms for detection of divers.

The participant is expected to carry out research and publish results in conferences and journals, participate in the preparation of proposals for research funding and in the writing of project reports, participate in teaching and mentoring graduate students (at least 90 hours per year).

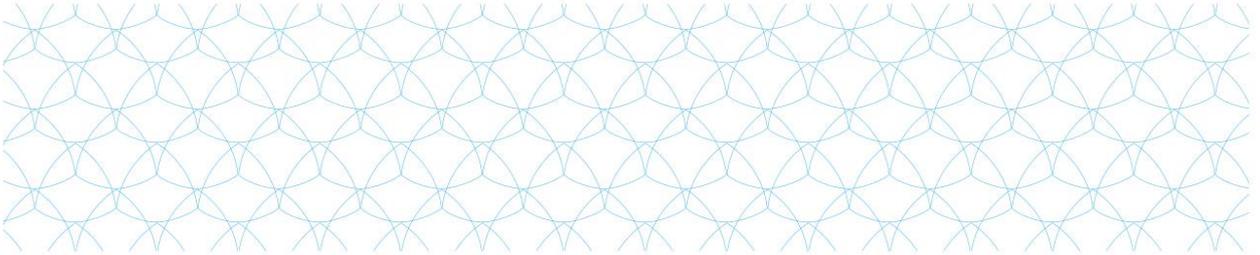
It is desirable to fill the position before July 2018, but the start date is negotiable. The expected duration of the position is four years.

METHODOLOGY:

Research in underwater robotics requires a large amount of laboratory and field activities. All algorithms will be continuously tested in laboratory conditions in the pool at UNIZG-FER, and also in the lake in Zagreb. Together with other members of the lab, it is expected that the candidate participates in field experiments at sea.

QUALIFICATIONS:

- MSc in a field related to signal processing, robotics and/or computer science especially AI and/or machine learning.



- Programming skills including experiences using C++, Python, and/or MATLAB
- Ability to present work clearly both written and orally
- Desirable but not crucial experience with ROS
- Desirable but not crucial prior experience with image processing, feature extraction, model detection and tracking methods, 3D point clouds, registration and model matching methods

SKILLS:

Candidates will have the following skills

- Flexibility and ability to work in a fast-paced environment
- Ability to deal with multiple priorities and projects
- Ability to work with students
- Strength to cope with schedules and deadlines
- Ability to work in distributed international teams
- Excellent organizational and communication skills
- A proactive approach, with initiative and ability to work independently
- Excellent written and spoken English.

Candidates shall be eligible to work in the European Union or in possession of a European Blue Card for two or more years. We are looking for someone to start as soon as possible.

APPLICATION DETAILS:

Applicants should provide the following material via email to Prof. Nikola Miskovic (Nikola.miskovic@fer.hr) Please use the subject line: "[PhD application]". Applications will be reviewed as they are received.

- A curriculum vitae
- A statement of research interest and past experiences (up to 2 pages)
- Names and contact information of three references
- A personal website, if available, where further details can be found

Deadline for applications: May 7th 2018