



INSTITUTO
SUPERIOR
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Research Fellowship Announcement

Institute for Systems and Robotics, Lisbon, Portugal



PÓLO DO I.S.T

The Institute for Systems and Robotics (www.isr.ist.utl.pt), in Lisbon, offers **one** research fellowship within project **PHITOM – Probabilistic High-Frequency Ocean Tomography for Underwater Communications and Navigation** (http://users.isr.ist.utl.pt/~jpg/proj/phitom/phitom_main.html).

Job description

This research aims to develop and apply techniques of ocean acoustic tomography (OAT) to the high-frequency (HF) signals used in underwater modems, extracting side information about the environment and the spatial configuration of the acoustic link. This will provide a clearer picture of the difficulties involved in a given transmitter/receiver configuration, as well as useful position/velocity data to be fed into the navigation system of an underwater vehicle. The methods and algorithms to be developed will be tested with data collected at sea, and integrated to form a coherent tool for HF OAT and communications. The activities proposed for this research fellowship would most naturally be carried out as part of a PhD program, although this is not a requisite.

Qualifications & Experience

Applicants should hold a Bachelor's or Master's Degree in Electrical Engineering, Physics, Applied Mathematics, or affine areas. A background on Bayesian inference for inverse problems is a plus. The successful candidate should enjoy participating in field trials at sea and interacting with researchers in other areas such as geophysics and underwater robotics. A high level of proficiency in spoken and written English is required.

Contract conditions

A 2-year contract will be offered to the successful candidate, with a yearly net income of 980 Euros x 12 months in accordance with the table of monthly maintenance stipends of the Portuguese science foundation for “Bolsas de Investigação” (alfa.fct.mctes.pt/apoios/bolsas/valores).

How to apply

Applications should be sent by email to Ms. Ana Esteves (aesteves@isr.ist.utl.pt) at the secretariat of ISR. The following documents should be provided: Letter of motivation, CV, course list with classifications, and the contacts of two referees (including institutional address and telephone/email) who can provide references. An interview may be conducted later to assess the suitability of any given candidate. The application deadline is **January 15, 2009**.

Further enquiries

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