

Sweden:PhD Student positions in Control Engineering with specialization in Robotics

The Control Engineering Group (CEG) at the department of Computer Science and Electrical and Space

Engineering at Luleå University of Technology, is now looking for two PhD student positions contributing to our

growing activities in the area of aerial and ground robotics. The PhD students will be part of a strong research

team with intense expertise in the area of aerial field robotics and will have the pleasure to work in multiple

European and National research projects in Robotics.

Subject description

Control Engineering comprises the analysis, design, optimization and implementation of autonomous control

systems

Project description

The research topics will focus in the following areas:

- Multiple camera view cooperative perception for UAVs

- Collaborative SLAM

- Cooperative Task allocation, scheduling and planning

- Aerial cooperative Visual Servoing

- Augmented Reality for robotics

- Event based constrained remote control

- Safe and robust navigation for aerial and ground robots in featureless or reduced feature environments

(e.g. mines)

- Visual Odometry on low light environments
- Environmental perception and online mission configuration for UAVs
- 6D real time Localization for aerial and ground robotic applications in mines
- Ultra Wide Band Localization
- Field Robotics demonstration of the corresponding research topics outcomes

Duties

The ideal candidate will perform research with substantial experimental components that should be published in peer-reviewed international journals and at major conferences. The position will include supervision of MSc students, Teaching Assistant tasks and support in acquire funding for future research projects from research funding agencies/councils, EU framework program or industry. The candidate will need to represent the group in

different occasions, both in Sweden and abroad, as well as to have an excellence in speaking English.

A doctoral student's main responsibility is to pursue doctoral studies with the aim to successfully defend a doctoral dissertation. The position may include departmental duties (typically teaching) with up to 20% of full-time employment.

Qualifications

The research tasks require a solid mathematical background with proven advanced experimental capabilities and excellent programming skills (e.g. C++). The candidates should have a strong vision to evaluate and demonstrate the research findings in real life operating conditions, in an approach to close the gap among pure theory and experimental verifications.

Read more; [General curricula for the Board of the faculty of science and technology](#)

Information

For further information, please contact Professor George Nikolakopoulos +46 920 491298, geonik@ltu.se

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Luleå University of Technology is actively working on equality and diversity that contributes to a creative study- and work environment. The University's core values are based on respect, trust, openness and responsibility.

In case of different interpretations of the English and Swedish versions of this announcement, the English version takes precedence.

A pplication

We prefer that you apply for this position by clicking on the application button below. The application should include a CV, personal motivation letter, reference letters, and copies of verified and translated diplomas Universities. Your application must be written in English. Mark your application with the reference number below.

Reference number: 1070-2017

Tentative Submission Deadline : 14 August 2017

[Further Information](#)