

Junior Software Developer for Unmanned Aerial Systems (UAS)

Closing date: 12/06/2020

Host Institution

The Cyprus Institute (Cyl) is a non-profit research and educational institution with a strong scientific and technological orientation, emphasizing international collaborations, cross-disciplinary research, innovation, and post graduate education. Cyl, through its established research centers, addresses challenging issues that are important at both the regional and international levels. Many of its research activities are being carried out in partnership with leading institutions in the respective thematic areas.

Job Description

The Unmanned Systems Research Laboratory (USRL; <http://usrl.cyi.ac.cy>) of the Cyprus Institute (Cyl) has recently developed in the framework of the “Autonomous Flying Platforms for Atmospheric and Earth Surface Observation” Project (APAESO). The facility operates various sizes of fixed and rotary wing Unmanned Aerial Systems (UASs), a mobile Ground Control Station and a fully equipped laboratory and workshop dedicated to Unmanned Systems and their applications. USRL is currently involved in various field of research, including atmospheric sciences, environmental surveillance, and photogrammetry (for 3D reconstruction of terrain and constructions).

In the framework of the EMME-CARE project (see more information below), The Cyprus Institute is seeking for a strongly motivated Junior Software Developer to join the USRL team. As part of his/her appointment, the successful applicant will contribute in the improvement of automation and user-interface friendliness of the current UAS as well as in the development of new UAS for customized applications. The successful candidate will be part of the Research and Development Team of the USRL under the supervision of the USRL manager and CARE-C Director.

This position is supported by the EU H2020 project “EMME-CARE” (Eastern Mediterranean and Middle East Climate and Atmosphere Research Centre; TEAMING Grant no. 856612), within which the Cyprus Institute is establishing a “Centre of Excellence” in Climate and Atmosphere research for the EMME region in cooperation with EU Advanced Partners (Max Planck Institute for Chemistry in Germany; University of Helsinki in Finland; and CEA in France).

Responsibilities

The successful candidate will be carrying out the following activities:

1. Assist in the development of small software applications for data acquisition systems.
2. Collaborate with postgraduate students to develop small applications for data acquisition and process of their scientific instruments to be integrated into UASs.
3. Maintain and improve the existing software features developed at USRL and follow-up with the existing coding style.
4. Participate in scheduled Test Flights for the purpose of the development and optimization of the platforms and the avionic/navigation systems.
5. Participate in field deployment and demonstrations of UAVs (including research campaigns in Cyprus and abroad).
6. Remain updated on UAS software and associated technology and make appropriate recommendations to the team leader.

7. Ensure compliance with service guidance, Institute's policy and procedures and Civil Aviation Authority (CAA) regulations.

Required Qualifications

- Bachelor Degree in one of the following: Computer Science/ Software Engineering
- To have a good understanding of Object Oriented programming.
- Good knowledge of C/C++, Java.
- Good knowledge of mySQL (mariaDB).
- Knowledge of Linux (UNIX) operating system.
- Basic knowledge of Python programming language.
- Basic knowledge of web technologies and JavaScript.
- Excellent knowledge of English both oral and written.
- Excellent communication and interpersonal skills.

Preferred qualifications

- MSc in a related subject will be considered as an additional advantage
- Experience in Arduino programming.
- Experience in electronic circuits.
- Experience with Raspberry pi.
- Basic understanding of analog and digital electronic circuits
- Experience in UAS
- Fixed-wing/ multicopter piloting skills

Application

For full consideration, interested applicants should process their application at The Cyprus Institute JobBoard (<http://jobboard.cyi.ac.cy/>) based on the instructions given. Applicants should submit a curriculum vitae including a letter of interest and a list of three references (including contact information). All documentation should be in English and in PDF Format. For further information, please contact Christos Keleshis (c.keleshis@cyi.ac.cy). Please note that applications which do not follow the announcement's guidelines will not be considered.

Recruitment will continue until the positions are filled.

Contact person: Christos Keleshis

Reference number: CARE-C_JSDUAS_20_07