

Postdoctoral position in Robotics and Control

Contacts: Gabriele Costante (gabriele.costante@unipg.it)

Francesco Ferrante (francesco.ferrante@unipg.it)

Keywords: Control systems, robotics, computer vision, learning for control, robustness.

Location: Engineering department, Università degli studi di Perugia, Perugia, Italy.

The department of engineering at the University of Perugia is currently looking for a postdoctoral researcher in the general areas of machine learning, systems and control, and computer vision with applications in robotics.

Project description: The general objective of this project is the analysis and the design of planning, robust control, perception and estimation strategies in the context of aerial robotics, with a specific attention towards guidance of drones in highly uncertain environments. In particular, the project aims at coupling robot perception and action, exploring different research directions, including:

- Devising perception-to-action strategies to provide robots with capabilities of optimizing and executing robustly trajectories that take into account the performance of sensing module and vice-versa.
- Understanding how classical robust control schemes can be blended with learning-based techniques to tackle uncertainties.

Qualifications: We look for candidates with a solid background in control and robotics. The ideal candidate is able to perform theoretical research, has a clear interest in applications, and has the ambition to apply cutting-edge results to practically relevant problems.

Requirements:

- A doctoral degree or an equivalent foreign degree, within the areas of mathematical systems theory, control, robotics, computer vision and theoretical machine learning.
- Solid publication records.

Deadline for application: 9 February 2022

Conditions of employment: The position is a one-year research appointment. The gross salary is approximately 23800€ per year.

Call and application form can be found [here](#).

Context: Perugia is located in Umbria in central Italy, an area of outstanding natural beauty and temperate climate. Perugia offers several opportunities for entertainment, culture, and fine dining.