

PhD position on Data-Enabled Network Control at UCLouvain, Belgium

Description:

The Network Control & Optimization (NeCO-OP) research group directed by Prof. Gianluca Bianchin at the Université Catholique de Louvain has a fully funded opening for one Ph.D. Student. Technical interests for this position are centered around the areas of systems and control, optimization, and network theory. The specific application focus is on automated electric vehicles and transportation systems, cooperative robotics, and energy systems.

The ideal candidate will be conducting cutting-edge research on one or more of the following areas:

- Design and operation of large networks (e.g., transportation, energy, mobility, etc.).
- Model-free and data-enabled control of cooperative robotic systems.
- Security of cyber-physical systems and networks (e.g., attack detection, fault isolation, secure control).
- Optimization used for feedback control.

Desired qualifications:

We are looking for a candidate who meets the following requirements:

- You have experience with or a strong background in controls, optimization, applied mathematics, and multi-agent robotics. Preferably, you finished a Master's degree program in Electrical or Mechanical (or related) Engineering, Applied Mathematics, or Computer Science.
- You have good programming skills and experience (Matlab, Python, C/C++).
- You are an enthusiastic researcher motivated to pursue cutting-edge academic research.
- You have good command of the English language (knowledge of French is not required).
- You are organized, persistent, creative, and ambitious.
- You have good communication skills and the attitude to participate successfully in the work of a research team.

Context:

UCLouvain is a comprehensive university offering, in the context of the present position, the opportunity of conducting cross-disciplinary research, collaborate with world-leading researchers, travel to attend international conferences, and gain teaching experience. Within the Science and Technology Sector, the position is attached to the Louvain School of Engineering and to the Institute for Information and Communication Technologies, Electronics and Applied Mathematics that offer opportunities for diverse and stimulating teaching as well as an environment to carry out ambitious research. The Louvain-la-Neuve site offers a unique living environment conveniently located at the heart of Europe.

Application process:

Application should include (as a single PDF file):

- Cover letter with a brief description of why you want to pursue research studies, about what your academic interests are, and how they relate to your previous studies and future goals.
- CV including your relevant professional experience and knowledge.
- Copies of diplomas and grades (or class course evaluations) from previous/current university.
- Names and contacts of two references.
- Copy of publications (if applicable).

To apply, please send an email to gianluca.bianchin@uclouvain.be with the application material.

For further information, please visit <https://gianlucabi.github.io>