

Cyberphysical Systems

POSITION TITLE: RESEARCH ASSISTANT IN ELECTRICAL ENGINEERING & COMPUTER SCIENCE

RESEARCH PROJECT TITLE: CYBERPHYSICAL SYSTEMS

FACULTY NAME & TITLE: NIKOLAOS FRERIS, ASSISTANT PROFESSOR OF ELECTRICAL ENGINEERING

RESEARCH PROJECT DESCRIPTION

The Cyberphysical Systems Laboratory (CPSLab) offers the opportunity to young and motivated students to do research on a variety of projects in Electrical Engineering and Computer Science. The goal of our lab is to design and implement efficient algorithms for large-scale systems of smart devices that possess sensing, computation, control and communication capabilities. We consider a great number of applications such as in wireless sensor networks, robotics, healthcare, power systems and transportation systems. Our research is fundamentally interdisciplinary and spans several areas of engineering and computer science such as: optimization, data mining, control, signal processing, and stochastic networks. For more information, please visit our website: <http://wp.nyu.edu/cpslab>

RESPONSIBILITIES OF THE POSITION

- Design, implementation and testing of algorithms for cyberphysical systems
- Writing publications, presentations and possibly patents
- Prototyping

****exact project description to be discussed and determined individually for each assistant****

ESSENTIAL QUALIFICATIONS:

- Strong mathematical background
- Good programming skills (fluency in Matlab required)

PREFERRED EXPERIENCE / SKILLS:

- Basic knowledge of control, signal processing and optimization
- Embedded system design
- Programming: Python, C++

APPLICANTS TO PROVIDE:

1. Statement of interest in the position
2. Transcript of degree(s)
3. CV
4. Two letters of recommendation