Doctoral students: Continuous Verification of CYber-Physical Systems (ConVeY)

ConVeY is a research training group funded by DFG, which is affiliated to Ludwig-Maximilian-University and Technical University Munich. Networks, computers, sensors, and actuators are being increasingly integrated into cyber-physical systems, i.e., software systems that interact with the physical world and must cope with its continuous behavior. Ideally their design and deployment should be accompanied by a formal check of correct behavior. A fundamental challenge in the verification of cyber-physical systems is the fact that they are subject to change. The physical environment changes continuously, at runtime, and in ways that cannot be completely foreseen at the design stage. At the same time, the requirements may change. Sought-after aspects include more functionality, lower power consumption, or faster response. In many cases, the system should be migrated to a different hardware platform. To face this multi-level continuous change, we are looking for excellent candidates to perform research in this area.

Your qualifications

- Above-average university degree in Computer Science or Electrical Engineering (or similar)
- Interest in cyber-physical systems, in robustness, safety or correctness of systems
- Basic knowledge in formal methods and/or control theory
- Goal-oriented, independent and structured work style

Our offer

- Current research topic in a challenging international working environment
- Full-time position (E13 TVL) with the perspective to receive a doctoral degree

To apply

Please send us your application by e-mail (seidl@in.tum.de) with the following documents:

- Curriculum vitae, copies of relevant certificates and diplomas, contact information for two references
- Short description of your research interests and your motivation for the application
- Master thesis and/or (if available) up to 3 publications

Application deadline: open, until the positions are filled

General Information

TUM is aiming to increase the number of women employees, and applications from women are expressly welcomed. People with disabilities, with essentially the same suitability and qualification, will be preferred. As you apply for a position at the Technical University of Munich (TUM), you provide personal data. Please note our data protection information according to Art. 13 Data Protection Basic Regulation (DSGVO) on the collection and processing of personal data in connection with your application. By submitting your application, you confirm that you have taken note of the data protection information of the TUM.

Munich, February 2020

Contact: Helmut Seidl seidl@in.tum.de (Phone +49 (89) 289 - 18155)

MORE INFORMATION: https://convey.in.tum.de/