

Formal methods in control (Munich, Germany)

We invite applications for a doctoral researcher position in the field of formal methods in control. The successful candidate is expected to advance the state of the art of abstraction-based synthesis and verification, to facilitate routine and efficient application of the approach to nonlinear continuous-state plants and complex specifications. Depending on background and interests of the candidate, the research focus will be either on algorithms and software development, or on theoretical foundations.

Required qualifications:

- MSc degree (or equivalent, giving access to doctoral studies) in Mathematics, Systems and Control, Computer Science, or a related field. Students about to complete their MSc will also be considered.
- Strong theoretical or mathematical background, and a strong interest in dynamical or control systems.
- Programming skills.
- Efficient communication skills in English.

In addition, an intended focus on algorithms and software requires past exposure to and strong interest in professional-grade software development, while for a focus on theoretical foundations a strong mathematical or theoretical background is needed. Experience in one of the following fields would be a plus but is not necessarily required: Set-valued or validated numerics; dynamic programming; formal methods in control; reactive synthesis; information-based complexity / optimal recovery.

The position is full-time and paid according to pay scale “TVOeD Bund, E 13”. Initial appointment is for two years, with possible extension contingent on availability of funds and research performance. The position is open to applicants worldwide; no special security clearance necessary.

Your complete application consists of the following documents, which should be sent *as a single PDF file* to the email address given below (deadline: May 5, 2019): CV with photo; one-page cover letter clearly indicating available start date as well as relevant qualifications, experience and motivation; university certificates and transcripts (both BSc and MSc degrees); contact details of up to three referees; possibly an English language certificate and a list of publications. All documents should be in English or German.

Gunther Reissig	Bundeswehr University Munich
Email: gunther2016@reiszig.de	Department of Aerospace Engineering
Subject: PhD ref 9xfb6	Institute of Control Engineering
http://www.reiszig.de/gunther/	Germany