

## **PhD Position on Formal Methods in Control, Bundeswehr University Munich, Germany.**

### **Description**

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

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