

PhD Positions at Technical University of Munich

The Research Training Group (RTG) “Advanced Optimization in a Networked Economy“ funded by the German Science Foundation (DFG) and jointly hosted by the Schools of Management, Informatics, and Mathematics at Technical University of Munich offers several positions (TV-L 13, 75%) for PhD students.

Focus of the Research Training Group

The challenges of a networked economy are fundamental and necessitate new research at the intersection of management science, computer science, and mathematics. New computational techniques are needed to solve large-scale optimization problems and to handle large data sets; incentive structures have to be considered in situations with multiple decision makers; uncertainties and other dynamics in the parameters of resource allocation problems require new modeling tools and solution strategies. The research program focuses on important application-oriented projects that would benefit from an interdisciplinary approach, including shared mobility, resource pooling, retail coordination, sales and operations planning, IT management, and airport operations.

Students with a background in one of the three involved disciplines and a strong interest in at least one of the other two fields will be offered a comprehensive study, training and research program. Specifically designed interdisciplinary projects will help to develop the ability to model, analyze, solve, and implement solutions for challenging real-world problems. A detailed description of the projects, participating researchers and further information regarding the application process is available at our website www.adone.gs.tum.de.

Application Process

We expect a Master of Science (or, in exceptional cases, an excellent Bachelor degree) in Management, Economics, Industrial Engineering, Computer Science, Mathematics or a related field and experience with Operations Research methods. Further, excellent written and verbal communication skills in English are required. Selected candidates will receive a three-year position according to the German public service salary scale. We specifically encourage applications by qualified female researchers. This applies also to disabled persons.

Applications in English (in one pdf document), submitted to adone@tum.de, should include:

- Cover letter, curriculum vitae, transcript of record,
- Writing sample (master thesis or seminar paper),
- Research proposal (about 2 pages) motivating your specific interest in Advanced Optimization in the Networked Economy,
- Names and contact details of three references.

All applications will receive full consideration.