

The Technical University of Munich offers

# Several positions in the PhD program "Advanced Optimization in a Networked Economy"

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, Computer Science, and Mathematics at Technical University of Munich offers several positions for PhD students starting in September 2021.

#### About us

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.

## We offer

Students with a background in applied mathematics, computer science, industrial engineering, operations management, operations research, or a related field and a strong interest in interdisciplinary work will be offered a comprehensive study, training, and research program. Custom-made PhD projects will help to develop the ability to model, analyze, solve, and implement solutions for challenging real-world problems. Further information is available at our website <a href="https://www.gs.tum.de/en/adone/call-for-applications/">https://www.gs.tum.de/en/adone/call-for-applications/</a>

TUM strives to raise the proportion of women in its workforce and explicitly encourages applications from qualified women. Applications from disabled persons with essentially the same qualifications will be given preference.

#### Your qualifications

We expect a 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.

# **Application process**

Applications in English should include:

- Cover letter
- CV
- · Copies of earned university degrees and transcripts of individual grades
- Writing sample (master thesis or seminar paper)
- Research proposal (about 2 pages) with fit to the general topic of the research training group
- One letter of recommendation and the names and e-mail addresses of two further referees (university professors)
- Proof of English language skills (e.g. TOEFL or IELTS)

and be submitted in digital form (one pdf document) to **adone@tum.de**. For the written application, we request to submit only copies of official documents, as we cannot return materials after completion of the application process.

### **Technische Universität München**

AdONE GRK 2201 Arcisstr. 21, 80333 München Dr. Isabel Koch adone@tum.de www.gs.tum.de/adone www.tum.de

As part of your application, you provide personal data to the Technical University of Munich (TUM). Please view our privacy policy on collecting and processing personal data in the course of the application process pursuant to Art. 13 of the General Data Protection Regulation of the European Union (GDPR) at https://portal.mytum.de/kompass/datenschutz/Bewerbung/. By submitting your application you confirm to have read and understood the data protection information provided by TUM.