

Open Positions

Research Assistant at the Institute of Operations Research of the Karlsruhe Institute of Technology (KIT)

The Institute of Operations Research (IOR) at the Karlsruhe Institute of Technology (KIT) invites applications for a Research Assistant position in the Discrete Optimization and Logistics research group, led by Professor Dr. Stefan Nickel. This position is part of an exciting new research project focusing on quantum-accelerated solution techniques for mathematical programming problems in the semiconductor supply chain. Key tasks in the project include

- Defining deterministic and stochastic mathematical programming models.
- Decomposing these models into subproblems based on planning levels and decision processes.
- Exploring established problem-specific solution techniques.
- Evaluating the potential for quantum acceleration of algorithmic subroutines.
- Deriving generalized criteria for quantum acceleration of mathematical programs.

The remuneration is according to the tariff agreement for the public servants of the federal states to [\(TV-L E13\)](#) in alignment with the qualification of the applicant. If employed as a doctoral candidate the opportunity of pursuing a doctorate is given. Positions can be started as soon as possible.

Applicants must hold a master's degree, or equivalent in Mathematics, Computer Science, or a related discipline with a focus on Operations Research or optimization theory. Applicants should have a profound knowledge and interest in Discrete Optimization as well as Mathematical Programming. Also required are very good programming skills as well as knowledge in the design of optimization algorithms.

Please send your application in electronic form to Prof. Stefan Nickel (stefan.nickel@kit.edu).

More information on the research group can be found under dol.ior.kit.edu.

KIT is an equal opportunity employer. Applicants with disabilities will be preferentially considered if equally qualified.