

# **Diploma / Master Thesis: Metaheuristic search algorithms for automated optimization of semiconductor tests**

## **Job Description**

A metaheuristic search algorithm is a problem solving technique used to provide a solution to an optimization problem. The target of this Diploma / Master Thesis is to implement a metaheuristic search algorithm for the automated optimization of semiconductor tests, with the aim of reducing the test time and the measurement errors. The following tasks will be required:

- Research on the state-of-the-art
- Theoretical analysis of the optimization problem
- Implementation of different search algorithms on a test software environment
- Measurements and simulations
- Data processing and result analysis

## **Your Profile**

You are best equipped for this task if you have:

- Good programming skills (C/C++, Java) with Visual Basic skills as a plus
- Electrical Circuit theory, Electronics
- Knowledge of laboratory equipment and measurement skills
- Good knowledge of Microsoft Office applications
- Work proficient English with German as a plus