



BA/FA

**Automation and
Optimisation of
Photonics
Measurement
Setup**

Objective:

Software development,
Measurement technology (photonic)

Your profil:

- Initial experience in working with Python or Matlab
- Ability to perform precise manual work
- Enjoy optimising and searching for efficient solutions

We offer:

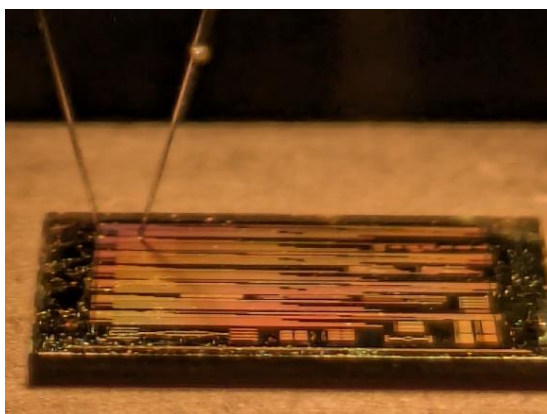
- Individual supervision and support
- Freedom to contribute and implement your own ideas
- The opportunity to work on exciting photonic measurement setups and familiarise yourself with new technologies

Background:

Photonic integrated circuits (PICs) have become a key component of modern communication technologies in recent years. They are used in various commercial products where they enable complex optical functions such as prefiltering and multiplexing. These PICs are typically manufactured on silicon platforms, similar to electronic circuits. To optimise their performance and expand their application areas, it is crucial to perform precise measurements and characterisations.

Your task:

In this exciting project, you will have the opportunity to actively participate in the development of an automated measurement setup for PICs. Your main task will be to research and implement innovative optimisation algorithms to precisely control modern piezo-adjustable stages. By applying these algorithms, you will be able to autonomously identify the optimal coupling point, which in turn will maximise the efficiency and functionality of the photonic circuits. Your work will help drive the development of these groundbreaking technologies while providing you with valuable insights into the emerging field of photonic integration.



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