



University of Stuttgart

Institute of Robust Power
Semiconductor Systems

Prof. Dr.-Ing. Ingmar Kallfass
Ingmar.kallfass@ilh.uni-stuttgart.de
Dr. Markus Gaida
gaida@ivei.uni-stuttgart.de

The study investigates the potential and feasibility of the inclusion of machine learning and artificial intelligence methods in the assistance of the admission process of the department's study degree programmes. A software tool shall be developed which incorporates the automated data extraction from admission forms into a data base, the automated access to international university ranking data bases, and the A.I.-driven assistance for efficiency enhancement through e.g. image and text recognition.

The study comprises the following sub-tasks:

- Development of an executable script with user control interface in a major object-oriented programming language for automated data base generation of applicant data,
- Generation of dummy and training data based on realistic admission data sets,
- Automated and parameterized access to major international university ranking data bases,
- Inclusion of image and text recognition features,
- Enabling statistical data analysis
- Investigation of the usefulness of employing machine learning algorithms and quantifying their improvement effect.

The project is a collaboration of ILH and the office of the dean of studies in the department of electrical engineering and information technologies

**Research Thesis
Master's Thesis**

Also available as student HiWi position

A.I.-Driven Assistance of the Admission Process in Department's Study Degrees

Real and Pseudo Applications (pdf, folder structure)

