

Internship at MTU Aero Engines AG – Three months

Development of a Graphical User Interface for a mechanics predesign tool in Python

Field of Research

The design of aero-engines is carried out by advanced predesign tools capable of combining an increased number of various disciplines. For this reason algorithms calculating the mechanics of compressors are being developed. The user interacts with the algorithm by providing the required design parameters as input and analysing the output of the calculations. A graphical user interface (GUI) is of high importance to improve this continuous exchange and processing of information. This internship focuses on developing and testing a prototype GUI for the mechanics calculation of compressors, based on an in-house developed advanced engineering program. The graphical user interface should be fully functional, intuitive and user friendly, complementing the design process.

Tasks

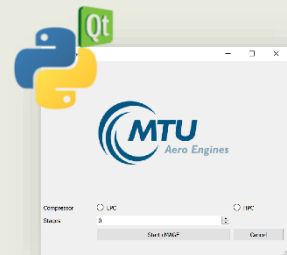
- Development of a prototype GUI
- Creation of the basic program architecture
- Investigation of possible interface protocols
- Testing of the prototype and documentation of the process

Prerequisites for potential candidates

- Studying in aerospace engineering or a comparable course of study
- Basic knowledge of the mechanical design of turbojet engines
- Programming experience in Python (preferable PyQt) and FORTRAN
- Autonomous and precise style of work
- Can-do attitude and ability to take initiative
- Good English language knowledge

Application

- Begin: October 2021
- Duration: Three months
- If interested, please send your brief application including an up-to-date CV and transcript



Contact

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