GUI Development: Analyzing and Visualizing Data with Matlab
Interdisciplinary Project (IDP)

**Situation:**
Big Data and the ever-growing access we have to more information is the driving force behind research and the wave of technological change sweeping across all industries. The Institute of Machine Elements, also called "Gear Research Centre (FZG)", has comprehensive (75+) facilities for examination and testing of machine elements, such as gears, bearings, synchronizations and couplings. These test rigs generate a huge amount of data every day. But all the data is useless if you can’t understand it. For this reason the FZG is developing a Graphical User Interface in Matlab for Data Visualization an Analysis.

**Objectives:**
After an intensive introduction to the existing Matlab GUI Application you will implement and develop new routines for data visualization and state of the art data analysis methods (post processing calculations of test rig data).

**Requirements:**
As a student of informatics we are sure that you can code (Matlab is easy to learn) and know how to use source control (GIT/GITlab). On top you should be reliable and interested in improving and extending software products.