



Bachelor- and Master thesis

Procedure for the systemic implementation of Data Analytics Use Cases

Initial situation:

The momentum of electric mobility continues. The electric traction motor in particular is becoming increasingly important. Particularly in recent years, innovative efforts have been and are being made in the field of electric motor development and production in order to be able to meet the constantly growing demands on the traction application of electric machines. A central point within the production and development of electric motors is the systematic increase of customer value, the improvement of production efficiency as well as the avoidance of errors in production. This requires new, innovative approaches that build on existing data in production and development and use it in the sense of data analytics procedures. The tracking and tracing of components, the application of predictive maintenance analyses to adaptive process control, which can autonomously control the process according to the various influencing factors, are conceivable example applications of data analytics.

Your task:

Your task is to research data analytics methods and evaluate their transferability to the field of electric motor production. A special focus of the thesis is the development of a methodology for the implementation of use cases.

The requirements:

- Studies in Mechanical Engineering, Industrial Engineering; Computer Science, Computational Engineering Science (or comparable)
- Motivation and commitment
- Very good knowledge of German or English

Offered is:

- Delimited tasks, quick introduction possible
- Expert insight into electric motor production
- Integration into research projects of RWTH Aachen University
- Publication in the course of a master thesis possible

Did we arouse your interest?

Please send a current excerpt of your grades as well as your curriculum vitae and certificates to the e-mail address below.

Your contact at the PEM:

Tom Möller, M.Sc.
Campus-Boulevard 30
D-52074 Aachen
T.Moeller@pem.rwth-aachen.de