

Master's Thesis / Bachelor's Thesis

Detection of Sensor Fault

Motivation

In the context of test stands basic equipment for converter fed electrical machines are voltage-, current- and position sensors. Malfunction of these sensors either lead to tripping of fuses or other unwanted operational states. If the parameters of the electric machine are well known, it is thinkable to evaluate a model in real time and to react immediately to extraordinary operational states and avoid blown fuses.

Research Questions

- How to update parameters in case of untrustworthy sensors?
- Which information is to be trusted in?
- How to set thresholds systematically?

Tasks

- Literature overview
- Selection resp. development of a monitoring scheme for one kind of sensor fault
- Proof of functionality by simulation and measurement

Further Information

- Start: asap
- Workplace: Electric Drives and Machines Institute, Graz University of Technology.

Contact

Ass. Prof. Dr. **Roland Seebacher**
Electric Drives and Machines Institute
Graz University of Technology
Inffeldgasse 18, A-8010 Graz, Austria
Tel: +43 (316) 873-7247
E-mail: roland.seebacher@tugraz.at
www.eam.tugraz.at

Univ.-Prof. Dr.-Ing. **Annette Mütze**
Electric Drives and Machines Institute
Graz University of Technology
Inffeldgasse 18, A-8010 Graz, Austria
Tel: +43 (316) 873-7240
E-mail: muetze@tugraz.at
www.eam.tugraz.at