Job offer
AC2T research GmbH

PhD Real-Time Failure Detection using Artificial Intelligence

As the **Austrian Competence Centre for Tribology** (www.ac2t.at), we have been developing technical-scientific solutions around the topics of friction, wear and lubricant application for about 20 years.

Technologies and methods in the field of artificial intelligence, machine learning and big data analytics will increasingly complement our research activities in the near future. Irreparable damage leading to the failure of a test rig or a machine component is often announced by characteristic patterns in measurement data. Using artificial intelligence should make it possible to automatically detect these patterns and take action before the damage occurs.

Real-time failure detection based on measurement data from our test rigs is one of our medium-term strategic goals. Therefore, we offer a full-time PhD position in this area.

OBJECTIVES

- Development of a method for real-time failure detection based on measurement data (e.g. force, temperature, vibration, acoustic emission)
- Conception and further development of algorithms in the field of artificial intelligence and machine learning
- Implementation and validation of the method on a selected test bench
- Presentation of results at national and international conferences

REQUIREMENTS

- Academic degree in the technical/scientific field (e.g., physics, computer science, mathematics, materials science, mechanical engineering)
- Willingness to carry out a dissertation
- Proactive and independent working style
- Strong interest in experimental methods
- Affinity for scientific computing (data analysis and modeling, Python, LabVIEW)
- Experience in machine learning and artificial intelligence desirable
- Excellent English skills

OUR OFFER

- Permanent employment
- Professional supervision and support by competent staff
- International project environment
- Salary: €/month 2,800.- gross (basis for negotiation) 40 hours/week
- Location of employment: Wiener Neustadt (TFZ)

Contact

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