## V39.2666

Eindhoven University of Technology has a vacancy for a

### Postdoctoral Researcher in Data-driven operations management (1.0 fte)

within the Operations, Planning, Accounting and Control (OPAC) Group of the School of Industrial Engineering.

**The School of Industrial Engineering** is one of the longest-established IE Schools in Europe, with a strong presence in the international research and education community, especially in the field of Operations Management and Operations Research. OM and OR are part of the core of the undergraduate IE program. The graduate programs (MSc and PhD) in Operations Management & Logistics attract top-level students from all over the world. Researchers in the school are member of the Beta research school and participate in industrial activities with members of the European Supply Chain Forum and consortia of research projects.

The group Operations, Planning, Accounting and Control (OPAC) conducts research in the area of Operations Management, with specific emphasis on

- Planning and Control in Manufacturing, Services, and Supply Chains;
- Distribution Logistics;
- Maintenance and Reliability;
- Finance and Accounting, oriented towards operational processes.

Research is generally quantitative in nature, while many of the researchers also engage in empirical research. All research is embedded in Beta, the KNAW-recognized research school for Operations Management & Logistics.

#### Data-driven operations management

The project aims to develop data-driven methods to predict the failure behavior of high-value assets (e.g., high-precision machine tools, healthcare imaging systems) for the purpose of taking proactive actions on maintenance planning and related resource allocation. The ultimate goal is to minimize the total cost of ownership while meeting system availability constraints of the assets. Study of the integrated performance of failure-prediction methods and maintenance-optimization models will be of particular interest. This PhD/postdoc position is part of the European Union funded project "Cyber Physical System based Proactive Collaborative Maintenance (MANTIS)". In the project, there will be close collaboration with two industrial partners: Philips Consumer Lifestyle and Philips Healthcare.

#### Tasks & Requirements

The postdoctoral researcher is expected to conduct research with Dr. Alp Akcay and Prof.dr.ir Geert-Jan van Houtum and publish research results in scientific journals, in close collaboration with industrial partners. The position also requires getting involved with some teaching activities of the OPAC group (a maximum of 10% of the time), including the supervision of BSc and MSc students that will work on subparts of this project with one or more of the industrial partners.

Applicants should have completed (or be close to completion of) a PhD degree in operations management, operations research, econometrics, applied mathematics, or industrial engineering, or a comparable domain with a solid background in (stochastic) quantitative research methods. Fluency in English is required.

#### Conditions of employment

We offer

• a challenging job in a dynamic and ambitious university;

- an appointment as a postdoctoral researcher for a period of 2 years with intended starting date as early as possible; the gross salary is in the range of € 3.044,- to € 3.997,- per month (on a full-time basis);
- in addition, 8% holiday allowance and 8.3% end of year allowance;
- a broad package of fringe benefits (including an excellent technical infrastructure, moving expenses, savings schemes, coverage of costs of publishing the dissertation/scientific papers and excellent sports facilities).

## Information

More information about this position and the research programs should be addressed to: Dr. Alp Akcay, phone +31 40 247 2216, e-mail: <u>a.e.akcay@tue.nl</u>. Information about terms of employment can be obtained from Mr. Kees Deneer, personnel officer (<u>pz.ieis@tue.nl</u>), phone: +31 402475204. Further information about Eindhoven University of Technology can be found at <u>http://www.tue.nl</u>.

# Application

Your application must contain the following documents (all in English):

- Cover letter (1 page max), which includes a motivation of your interest in the vacancy and an explanation of why you are a good fit for the project;
- An extensive curriculum vitae;
- Course list of your graduate and bachelor programs (including grades);
- One or more of the candidate's best papers;
- Name and contact information of two references.

If you are interested, we invite you to apply as soon as possible. Screening of candidates will start immediately and will stop once the position is filled. You can apply by pressing the 'apply now' button for this vacancy on the TU/e web-site or click <u>here</u>.

Applications per email are not accepted. Please note that a maximum of 5 documents of 2 MB each can be uploaded. If you have more than 5 documents you will have to combine them.