Make Maintenance Better

Operation Research Afternoon

4.9.2018 at 15:00

at Aalto University Otaniemi Campus Registration (free entry)

Program

15:00	Opening of the event (**Antti Punkka**, Aalto SCI; **Mikael Collan**, LUT)
15:10	**Pekka Mild** (Maintpartner Oy): *Online detection of abnormal patterns in process signal data to spot early indications of emerging malfunction – a kick start to wards zero downtime*
15:40	**Mikael Collan** (LUT School of Business and Management): *Vision of a viable global ecosystem around predict ive maintenance and additive manufacturing*
16:10	**Mikko Alanko** (VR Group): *Smart Maintenance in railway fleet management*
16:40	coffee break
17:00	**Alessandro Mancuso** (Department of Mathematics and Systems Analysis, Aalto SCI): *Systemic approach for optimizing portfolios of risk mitigation actions*
17:30	**Olli Mali** (KONE Corporation): *Intelligent KONE 24/7 Connected Services: Analytics development*
18:00	networking and refreshments

About the Operation Research Afternoon

The objective of the event is to **bring together industry stakeholders, researchers, and students interested in the topical area of maintenance planning and management** and developing maintenance in general. The topic is very important for many industries as improvements in planning and management of maintenance improve reliability and decrease maintenance costs of all kinds of systems, ranging from large technical industrial systems to single components.

Improved planning and management solutions are more and more based on up-to-date and real-time data and forecasting the behavior, the states, and the remaining lifetimes of a systems' components. Data-based management may decrease the importance of traditional long-term maintenance plans and creates a need for the development of new optimization models and methods for maintenance planning/ management.

Consequently, the field offers multi-disciplinary possibilities for joint research and development between industry professionals and researchers with interests in for example **operations research, operations management, and advanced statistical and computational methods**.

This event gives examples on how operations research and analytics are used in data-based maintenance planning and management, and discusses many issues relevant in the area.

Aalto University

LUT Lappeenranta University of Technology

MFG 4.0

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About lecturers

Pekka Mild (Maintpartner Oy) is the head of development for MP INtelligence, an advanced performance monitoring and predictive maintenance system applied in heavy industries

Mikael Collan (LUT School of Business and Management) is a professor of strategic finance and business analytics at Lappeenranta University of Technology

Mikko Alanko (VR Group) is the vice president of maintenance systems and analytics at VR fleet maintenance. He is responsible for developing maintenance methods and intervals using data and analytics

Alessandro Mancuso (Department of Mathematics and Systems Analysis, Aalto SCI): is a double doctoral candidate working at Aalto and at the Energy Department, Politecnico di Milano. His research interests include the development and application of probabilistic methods for the assessment of risk and safety in complex technological systems

Olli Mali (KONE Corporation): leads the analytics team behind the algorithm development for KONE intelligent maintenance services

For whom?

The event is **free of charge and open to everybody** interested in the topic. It is especially useful for researchers and students interested in applying methods of operations research, analytics or operations management and for industry stakeholders who want to learn how these methods are or could be applied in practice.

For researchers and industry stakeholders, the event offers a great opportunity to listen to industry experts, to discuss research and development needs within this topical area, and meet students. For students, the event also provides a possibility to learn how and to what kind of problems methods of OR and analytics etc. are applied in the field.

Where?

The event will take place in **Otaniemi** at Aalto Undergraduate Centre (Otakaari 1, Espoo; **former TKK main building**) in **hall M1**, which is located on the 2nd floor, directly above entrance Y which is accessible from Alvarin aukio. See the campus map for the location of entrance Y

More about MFG 4.0 Project

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