## One or more Postdoc positions in Computer Science and Algorithm Design

At the Faculty of Engineering and Science, Department of Materials and Production one or more Postdoc positions in the area of Computer Science and Algorithm Design are open for appointment from October 1<sup>st</sup>, 2022 or soon thereafter.

## Job description

The position is within the Operations Research (OR) group at Aalborg University and the research is in highly synergic cooperation with leading Danish and European companies and international academic partners. The OR group focuses on solving complex problems, which require high-level modelling, data analysis and management capabilities as well as developing solution algorithms applying mathematical and computational approaches. The group has a particular interest in autonomous cyber-physical systems and decisions related to these systems. The application area of the work covers a wide range of autonomous systems spanning AGVs, UAVs, USVs, satellites, and more.

We are looking for candidates with a strong interest in interdisciplinary research at the intersection of Computer Science, Operations Research, and Mathematics. Backgrounds in algorithm design and implementation or machine learning or computational optimization along with strong programming skills, in e.g., Java, C, C++ and Python, will be an advantage. The candidate is expected to contribute to ongoing research projects as well as participate in activities supporting future research projects and initiatives.

As a successful applicant, you will participate in research projects with world-leading partners in the area of manufacturing, transportation, health care and aerospace. You will support academic and collaborative research activities in the group and with external partners. The positions are primarily linked to ongoing and incoming research projects with external partners. You will also contribute to education, i.e., some minor teaching activities within the Global Business Engineering and Operations and Supply Chain Management engineering programs, as well as in other study programs at the university, can be expected.

The candidate should be able to highlight research activities in the form of ISI's Web of Science publications and the preferred candidate will also be able to demonstrate the application of research in practice. Appropriate candidates should have a master's and PhD degree in Computer Science, Software Engineering, Operations Research, Applied Mathematics or a related field. Experience with software or algorithm implementation in cloud environments will be considered a strong advantage. The applicant's profile should, therefore, address one or several of the areas of optimization algorithm (learning-based, heuristics, meta-heuristics, exact methods) design and/or development, machine learning, and/or software engineering.

Interested applicants may obtain further professional information from Associate Prof. Peter Nielsen, +459940 8932 or e-mail: <u>peter@mp.aau.dk</u>