Master Thesis: Analytics/Machine Learning in Production Supply Chain

Background of thesis project:

Supply Chains work effectively when there is good flow of information, goods and money. Information is one vital aspect which is needed in different processes and in different formats! “Different formats of data” sounds simple but there is lot of opportunities and challenges in this area of supply chain. Building on this subject there is a growing need for developing and applying analytical and machine learning tools to address these challenges.

Suitable background

Candidates should be in the final year of their Master’s studies. Candidates are expected to have:

- Master Degree in Supply Chain, Logistics, Computer Science/Engineering or IT
- Knowledge and profound interest in Analytics(Predictive) and/or Machine Learning relevant topics
- Knowledge of Logistics and Supply chain concepts
- Prior experience working with Sales and Operation Planning(S&OP) and Forecasting is beneficial
- Excellent verbal and written communication skills in English

Description of thesis work

Sales and Order Planning(S&OP) process plans and agrees on the volumes for all business units for coming months. S&OP then shares the volumes with different Operating Plants and Production Logistics to plan their supply chain activities. This thesis will need to investigate and pilot analytical/machine learning tools that can translate the S&OP information into forecasting information for “Manage Packaging pool” and “Transport Finished Product” processes.

- Benchmark the tools and methods used by automotive & trucking industry connected with thesis subject
- Design/Adapt and propose the tools that can be used per process
- Evaluate proposal using proof of concept use case per process

Thesis Level: Master

Language: English

Starting date: January 2019 (Flexible around January)

Number of students: 2 (preferably one from Computer Science and other from Supply Chain)

Tutor: Teja Yerneni, End to End Production Logistics, +46 73 902 2847

To apply: https://xjobs.brassring.com/TGnewUI/Search/Home/Home?partnerid=25079&siteid=5171#home

Last application day 6th of Nov 2018