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PROFILE

Every decision should be made after drawing conclusions from the analysis of relevant available data. In the modern, information abundant, world this often means processing very large amounts of data. Analyzing complex datasets can yield organizations new insights on their markets or help improve their processes. My role in this new world is to combine my understanding of business processes with relevant quantitative techniques to come up with good decisions. I work across the entire data landscape from conducting operational analyses to coming up and implementing entire automated data pipelines.

EDUCATION

September 2014 – August 2016, University of Twente, Master of Science (MSc.)

Program: Industrial Engineering and Management. Specialization: Production and Logistics Management. GPA 8.09. Thesis: *Adaptive and Scalable Urban Traffic Light Control in an Indian Metropolis (grade 9)*.

The program concerns applying mathematics to solve decision making and optimization problems to improve the operations of organizations. Enjoyed courses such as *Statistics, Stochastic Modeling* and *Discrete Optimization*. Chose elective courses from *Applied Mathematics* and specialized in *Maintenance Management*, a good application of *stochastics modeling* and *optimization* tools.

In my Master's Thesis I designed, implemented, and simulated a control algorithm for a network of traffic lights. The key challenges were to cope with the limited traffic information available to the system and the large and complex network topology. The assignment deepened my knowledge on stochastic control and quantitative simulations.

September 2011 – June 2014, Lappeenranta University of Technology, Bachelor of Science (BSc.)

Program: Industrial Engineering and Management. Specialization: Supply Chain and Operations Management. GPA 4.33 (out of maximum 5.0 on local scale; 221 / 180 ECTS). Graduated with *Distinction*.

This study introduced me to Industrial Engineering. Got interested in Applied Mathematics and its quantitative methods taking courses from Applied mathematics and doing a Minor on *Computer Science*. Interest in these subjects led me to choose the Master's degree in Twente.

EMPLOYMENT HISTORY

September 2016 - Present, ARS Traffic & Transport Technology B.V., Den Haag, The Netherlands

Data Analyst, Traffic Management & Information

- Support and assist *Service Management*
 - Conduct challenging technical and domain related analyses (internal and external)
 - Automate and improve data quality monitoring process
 - Design data calibration algorithms to improve data quality
- Technical expert in *new projects*
 - Produce software/system architecture and design for various projects/products
 - Design, test and evaluate various algorithms used in the various systems e.g. *License plate matching, Traffic violation rate predictor, travel time smoothing algorithm*
 - Hardware development to come up with new sensors
- *Research and Development* tasks
 - Automated data quality monitoring system
 - Deep learning approach to predict traffic values (flow, speed, travel times)

Skills learned	Data Analysis, Machine learning, Databases (design and exploitation), Software/System design, Software testing
Frameworks used:	Python, Pandas & Numpy, Keras & Tensorflow, MySQL, MSSQL, C++, QGIS

September 2012 – May 2013; September 2013 – May 2014, Lappeenranta University of Technology, Lappeenranta Finland

Part time teacher, Department of Applied Mathematics

- Tutor exercise classes
 - Help students solve weekly homework on first year engineering topics: Calculus, Linear Algebra, and Differential Equations.

COMPUTER SKILLS

Python (& Pandas, Numpy, sklearn)	Good, Daily professional use <ul style="list-style-type: none"> • Data manipulation, visualization, analysis, and machine learning
Keras & Tensorflow (using Python)	Basic knowledge <ul style="list-style-type: none"> • Deep convolutional nets, Recurrent neural networks (LSTMs), Autoencoders
MS Excel	Good, daily professional use <ul style="list-style-type: none"> • Automating work with VBA macros
RDBSM and SQL (MySQL, MSSQL)	Good, daily use <ul style="list-style-type: none"> • Writing complex queries to produce data for analysis • Designing database structures, and processes for various projects
C++	Basic knowledge, long time hobby: <ul style="list-style-type: none"> • Production code for the <i>license plate matching algorithm</i>

LANGUAGE SKILLS

Finnish – First language
English – Excellent

Swedish - Good
Dutch – Basic

German – Basic