

Priidik Vilumaa

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SUMMARY I am a data scientist interested in improving businesses through operations research methods. I have worked on simulation and optimization in various domains like logistics, retailing and production. Efficiency is the highest form of beauty and working on operations research algorithms is a great way of practicing this mentality. My typical day includes lots of Python, OR-Tools and Yorkshire tea.

SKILLS

- Programming (Python, SQL, Java, Javascript)
 - Methodologies (Mathematical Optimization, Heuristics, Simulation, Machine Learning)
 - Tools (OR-Tools, Git, Gurobi, CPLEX, Power BI, AnyLogic, AWS, Google Cloud, Docker)
 - Languages (English, German, Estonian)
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WORK HISTORY

Software Engineer / Srimi / 11/2024 - Present

- Full stack software engineering tasks including frontend, databases, docker images, backend etc

Senior Operations Researcher / Omnistream - Remote (HQ in Sydney, Australia) / 9/2021 - 8/2024

- Rewrote an existing multi-knapsack model to cut runtime by 50% and increase average objective value 2%
- Extending and building new optimization models in the retail domain using CP-SAT
- Advance topics like relaxations, heuristic infeasibility reasoning, returning diverse multiple solutions, multi-stage optimization approximations and poor mans column generation

Freelance Operations Research Consultant / VOPT Consulting / 1/2020 – 9/2021

- Development of optimization algorithms in a variety of application domains using both exact and heuristic methods, a combination of the two or even simulation (see projects below)

Student Researcher / Physical Internet Center @ Georgia Tech – Atlanta, USA / 3/2019 – 12/2019

- Development of optimization algorithms for shipment and vehicle routing
 - Data analysis and processing for large scale agent based simulation models
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PAST PROJECTS

- Employee allocation into office space using constraint programming
- A simulation platform with optimization for scheduled taxi services
- Optimizing buy/sell schedule for commodity trading
- Designing printing configurations to minimize waste and number of setups
- Industry research projects with:

 Steelcase

 VWR
part of avantor

 Mercedes-Benz



EDUCATION

Exchange Student in Industrial and Systems Engineering / Georgia Tech / 2018 – 2018

MSc in Supply Chain Management and Informatics / Technical University of Munich / 2017 –2020

BSc in Logistics cum laude / Tallinn University of Technology / 2014 –2017