JAKO ROSTAMI

Stockholm, Sweden | +46 704-40 16 35 | GitHub | rostami.jako@gmail.com | LinkedIn

EDUCATION

Uppsala University
BSc Statistics, Department of Statistics
Thesis: *"Time Series Forecasting of House Prices: An Evaluation of a Support Vector Machine and a Recurrent Neural Network with LSTM cells"*
Grade: Passed with distinction
Courses in mathematical statistics, probability theory, time series analysis, statistical machine learning and more mathematical courses

PROFESSIONAL EXPERIENCE

H&M Group, Senior Machine Learning Engineer
AI & Analytics Domain, Machine Learning Area
Feb 2025 – Current, Stockholm, Sweden

- Designing, building and maintaining a Conformal Prediction System for Demand Forecasting services on large scale
- Prototyping multimodal models to extract soft semantic attributes (e.g, trendiness, fashionability, style, universalism) from product images, integrating these into a user-personalized regression model framework using text embeddings and classical ML to weight user preferences and drive conformal prediction-based intervals
- Part of CTO's strike team for re-designing the technical landscape at H&M for AI and Machine Learning for the company's omnichannel domains

H&M Group, Machine Learning Engineer
Nov 2023 – Feb 2025, Stockholm, Sweden

- Maintaining, serving and monitoring end-to-end ML services for the Supply Chain such as Demand Forecasting, Inventory Optimization, Order Allocation, Stock simulation etc
- Designing and implementing data/ETL pipelines with Azure and Google Cloud
- Developing APIs for ML models, services and integrating other APIs in our end-to-end pipelines
- Tools and frameworks: Python, Databricks, Kubernetes, Docker, BigQuery, Vertex AI, Azure DataFactory, Container Registry, Artifact Registry, Github Actions, YAML, JSON, Bash scripting, CI/CD, SQL, dbt

Lidl, Data Scientist
Supply Chain & Sales
Jun 2021 – Nov 2023, Stockholm, Sweden

- Leading end-to-end development enhancement of Supply Chain Inventory Management in R and Python
- Implemented advanced computer-vision PoC to drive improvements for Supply Chain operations such as minimizing write-offs and staff overtime hours
- Developed decision intelligence solution using Bayesian Networks and probabilistic programming
- Massive data wrangling using Polars for streamline and high-performance operations
- Industrialization/pre-deployment experience with long-term ML projects calculated cost-savings of ca €40M

Lidl, Data Analyst
Supply Chain
Oct 2020 – Jun 2021, Stockholm, Sweden

- Co-leading a rollout for an automatic ordering system which uses tree-based foercasting methods
- Developed a complete foundation for analysis of the system for the regional Supply Chain department
- Used Bayesian and classical statistical analysis

Lidl, Supply Chain Analyst
Supply Chain
Sep 2013 – June 2019, Stockholm, Sweden

- One out of four Supply Chain Analysts with responsibility for perishable, non-perishable, and frozen goods
- Conducted time series forecasting, demand planning, demand forecasting to ensure optimal stock, maximize revenue, reduce write-offs and decrease holding inventory
- Managed promotion and planning, aligning marketing and sales strategies
- Optimized inventory levels using time series models, reducing waste and improving turnover and write-offs

TECHNICAL PROJECTS & OPEN-SOURCE

- **expectation** (Creator & Maintainer) – Sequential A/B testing and Experimentation
  - Presented at PyCon & PyData 2025 in Frankfurt/Darmstadt, Germany
  - Comprehensive Python library for experimentation and advanced statistical analysis
  - Implemented confidence sequences, sequential testing methods, and e-processes
  - Built tools for e-value computation and game-theoretic probability analysis

- **supplyseer** (Creator & Maintainer) – Computational Supply Chain
  - Also presented at PyCon & PyData 2025 in Frankfurt/Darmstadt, Germany
  - Python library for advanced Supply Chain, Optimization, and Logistics
  - Implemented Digital Twin modules, Diffusion flow modeling, Vector Field Analysis, Bayesian Networks, Dynamic & Stochastic Economic Order Quantity and many more

- **Applied Machine Learning & Other Projects**
  - **GenAI Playground** - Developed prototype apps showcasing various GenAI implementations for demonstration and training purposes like AI-to-AI Dialogue (Claude and Gemini have discussions on a topic you decide)
  - **Machine Learning Pipeline Deployment with FastAPI and Docker** - Full production-grade level pipeline deployment with a predictive machine learning ensemble model using geometric mean prediction, ability for end-user to retrain models via API, continuous model and data monitoring via API
  - **Cough Classification** - Engineered a hybrid CNN architecture combining topological data analysis, Mel Spectrograms, and custom tensor transformations

ADDITIONAL

Languages: Swedish (native), English (fluent), Norwegian (professional)

Technicals: Python, R, SQL, Azure, Google Cloud, Snowflake, Docker, Kubernetes, Git, Github, BigQuery, dbt, Vertex AI etc

Libraries: Polars, pandas, numpy, JAX, PyTorch, Keras, TensorFlow, PyMC3, numpyro, FastAPI, sklearn, matplotlib, plotly, ggplot, tidyverse, dplyr, data.table etc

ML Knowledge: Causal Inference, Bayesian Methods, Deep Learning, Probabilistic Programming, Forecasting, Statistical Modeling and Analysis, Time Series, Graph Modeling