Valdas Druskinis

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About me

Internationally experienced engineer with a background in building AI and Data solutions. I primarily focus on machine learning, software engineering, data engineering, optimization and computer-vision. As a co-worker, I am highly driven, independent, and thrive in problem solving. I approach challenges with enthusiasm and maintain a positive attitude.

Experience

Machine Learning Engineer Aug. 2024 – Present

carVertical *Kaunas, Lithuania (Hybrid)*

- Developed end-to-end ML/DL/LLM solutions from research to production deployment
- Optimized ML serving infrastructure to process 6M+ images daily, improving GPU utilization and reducing server costs through pipeline optimization and model reusing
- Built comprehensive MLOps platforms using Terraform and FastAPI, managing complete model lifecycle from training to monitoring to serving
- Created CI/CD pipelines and AWS infrastructure for automated model deployment and ML service orchestration
- Built and independently maintain MLOps platform serving multiple cross-functional engineering teams

AI Engineer Sep. 2023 – Aug. 2024

INTUS Windows LT *Šiauliai, Lithuania (Remote)*

- Built end-to-end RAG systems processing large-scale unstructured data for production GenAI applications
- Architected cloud-based data infrastructure managing relational and vector databases for AI workloads
- Developed vector embeddings pipeline and retrieval systems for enterprise RAG implementations
- Designed and implemented LLM and computer vision solutions for warehouse and process optimization tasks
- Led data strategy and collection frameworks across engineering teams

Data Scientist (Freelancing) Feb. 2024 – Jun. 2024

A Danish client *Denmark (Remote)*

- Built and optimized ML time-series forecasting models
- Implemented automated training pipelines using Dagster and Comet ML for experiment tracking and versioning
- Delivered end-to-end MLOps solution from model training to serverless model deployment

Software Engineer Jul. 2022 – Jul. 2023

Mercedes-Benz AG *Sindelfingen, Germany*

- Built computer vision system using CNNs for automated factory inspection, reducing human error in quality control
- Integrated real-time CNN models into production environment for scalable manufacturing monitoring
- Optimized existing production ML models, improving detection accuracy by 8% and inference by 1s

Python Developer Jul. 2021 – Jul. 2022

Centrica Energy Trading A/S *Aalborg, Denmark*

- Developed time-series based ML models for the gas trading floor
- Maintained our forecasting library and other associated systems
- Built dashboards and actively contributed to our data analytics platform

Education

Aalborg University Aalborg, Denmark

MSc. Manufacturing Technology *Sep. 2021 – Jun. 2023*

During my master's degree, I delved deep into the field of robotics, with a particular emphasis on its application in industrial settings. My primary focus was on advancing human-robot interaction and developing AI tools for industrial applications. This involved engaging in collaborative projects with several companies. Some of the most exciting projects I have worked on:

- Developed an AI system that would aid human workers in the factory by detecting, estimating the pose and classifying if the part is produced correctly (Publication: https://ieeexplore.ieee.org/document/10275651)

- Developed an AI system that would be easily scalable to detect nuts placed on metal sheets with RGB camera

Aalborg University Aalborg, Denmark
BSc. Robotics *Sep. 2018 – Jun. 2021*

Throughout my bachelor's degree, I acquired a comprehensive understanding of various aspects of robotics and engineering including robot kinematics, control theory, statistics, matrix optimization, and software development. I actively participated in several engaging projects that highlighter my skills and passion for the field, including:

- Autonomous Golf Car Development: Leveraged Python, C++, and the NVIDIA Jetson computing platform to create a system for the autonomous golf car
- Autonomous Sidewalk Inspection: Collaborated on a project involving the utilization of computer-vision and AI techniques written in C++ and Python

Technical Skills

Languages: Python, Go, C++
ML Frameworks: PyTorch, sklearn, XGBoost, FastAPI, Torchserve
Data tools: Weaviate, Bigquery, PostgreSQL, MongoDB
Developer Tools: Github Actions, Docker, Torchserve, MLFlow, Terraform, Comet, Dagster, Airflow
Cloud: AWS