NILS VOS

Oud-Beijerland, Netherlands | vosnils@proton.me | LinkedIn | GitHub | Portfolio

PROFESSIONAL SUMMARY

Data Science & AI student with professional experience in software engineering and building automation systems. Specializing in machine learning, computer vision, and industrial IoT applications. Proven track record deploying production ML models, developing automation tools, and managing data infrastructure. Strong foundation in Python development, deep learning frameworks, and MLOps practices.

TECHNICAL SKILLS

Programming & Development:
Python, SQL, Linux System Administration, Git, Data Processing, API Development

Machine Learning & AI:
Deep Learning, Neural Networks, Computer Vision, TensorFlow, Keras, Scikit-learn, Model Training & Evaluation, Data Preprocessing, Feature Engineering

MLOps & Deployment:
Azure ML, Docker, Model Deployment, CI/CD Pipelines, Cloud Infrastructure, FastAPI

Industrial Automation:
Tridium Niagara, Building Management Systems, Industrial IoT, Database Management, Automation Tool Development

PROFESSIONAL EXPERIENCE

Software Engineer / Data Engineer | FOX BMS

Present | Heinenoord, Netherlands

- Develop and deploy building management systems using Tridium Niagara platform for commercial buildings, healthcare facilities, and industrial environments
- Create Python automation tools for system configuration and deployment, significantly reducing setup time and improving reliability
- Design and implement data pipelines for processing real-time sensor data and building analytics
- Manage database systems and Linux infrastructure supporting critical automation systems across multiple client sites

EDUCATION

Bachelor of Applied Data Science & Artificial Intelligence

Expected June 2028 | Breda University of Applied Sciences (BUAS)

- Focus: Machine Learning, Computer Vision, Deep Learning, Data Engineering, Industrial AI Applications

CompTIA Security+ Certification (In Progress)

Expected 2026 | Cybersecurity Fundamentals, Network Security, Threat Management

KEY PROJECTS

PlantSeg - Agricultural AI System

Production Deployed | Python, Deep Learning, Computer Vision, Azure ML, Docker

- Deployed production computer vision system for agricultural client achieving high accuracy on plant segmentation tasks
- Implemented MLOps pipeline with automated retraining, cloud deployment, and on-premise inference capabilities
- Optimized infrastructure achieving significant annual cost savings while ensuring GDPR compliance

DAF Truck Predictive Maintenance System

Academic Research Project | Python, Machine Learning, Data Analysis

- Developed predictive maintenance system for commercial vehicle fleet analyzing telematics and vehicle data
- Applied data mining methodology for feature engineering and failure prediction to optimize maintenance scheduling

Roadie - Traffic Safety AI System

GitHub | TensorFlow, Neural Networks, Data Engineering

- Built neural network achieving 94% accuracy predicting vehicle accidents using telematics and environmental data
- Designed data warehouse with feature engineering for real-time risk assessment based on driving behavior

Additional ML Projects

- Niagara AI Pipeline: Integrated machine learning with building automation platform for predictive maintenance and optimization
- Video Analysis System: Built end-to-end NLP pipeline for emotion classification from video content
- Player Analytics: Developed classification model analyzing athlete performance data for sports recruitment strategy
- Robotic Control: Implemented reinforcement learning for laboratory robot automation and precision control