

DAVID MATOS

Lead Cloud & AI Systems Engineer

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📍 Nijmegen, NL

in David Matos

🔗 dmatos2012

EXPERIENCE

Lead Cloud & AI Systems Engineer

Track32

📅 09/2021 – Present

📍 Nijmegen, Netherlands

- Led architecture and development of production AI computer vision services across multiple clients in Python and SQL
- Designed and maintained full AWS cloud infrastructure with **Terraform**: ECS, Lambda, Batch, API Gateway, ALB, RDS (PostgreSQL), DynamoDB, ElastiCache, S3, CloudFront, WAF, SQS, SNS, Route53, ACM, IAM, Secrets Manager, CloudWatch
- Designed versioned **REST APIs** on AWS Cloud infrastructure, deployed via Docker containers behind AWS API Gateway and JWT authentication; SQL and Python
- Built and maintained a client-facing **Django** web portal which enabled clients to interact with our AI models for their specific agricultural needs; JavaScript and Python
- Modified existing QR-code library to integrate better and expand QR-detection for our clients; Typescript.
- Built and deployed computer vision **inference pipelines** using ONNX Runtime, Triton Inference Server, and TensorRT on GPU instances in AWS
- Built different **event-driven microservices**: SNS-based monitoring, DynamoDB triggers; AWS
- Developed an AI integrated **PyQt5 desktop application** with license verification and window installer integration; NSIS and Python.

Deep Learning Intern

ViNotion

📅 09/2019 – 12/2019

📍 Eindhoven, Netherlands

- Researched the impact of license plate obfuscation on object detection accuracy
- Implemented Mask-RCNN and SSD object detectors to run controlled experiments

OPEN SOURCE

Contributor

Nushell & utils/coreutils

📅 2022 – Present

- 30+ merged PRs across both repos: Ported **utils/coreutils** commands (`cp`, `mv`, `ln`, `uname`) into Nushell as drop-in replacements, coordinating public API changes upstream in coreutils
- Refactored coreutils internals into reusable public interfaces; bug fixes to `chmod`, `cp`, `ls`, `mktemp`

Contributor

PyO3/maturin, cargo-semver-checks, Ghostty

📅 2021 – 2025

- PyO3: Decimal/Fraction Python-Rust interop, uv backend for maturin (Rust)
- cargo-semver-checks: 3 new semver lints for API breakage detection (Rust)
- Ghostty: Nushell shell integration, GTK features, i18n (Zig)
- Also: just, matplotlib, yolov5

SKILLS

Django

FastAPI

PostgreSQL

GitLab CI/CD

Redis/ElastiCache

Kubernetes

PyQt5

AWS (ECS, Lambda, Batch, RDS, DynamoDB, ElastiCache, S3, API Gateway, CloudFront, SQS, SNS, IAM)

Terraform

ONNX Runtime

Triton Inference Server

Python

Rust

Zig

SQL

Typescript, JavaScript

EDUCATION

M.Sc. Automotive Technology

Eindhoven University of Technology

📅 09/2018 – 10/2020

📍 Eindhoven, Netherlands

Relevant coursework: Convolutional Neural Networks for Computer Vision, Machine Learning for Signal Processing, Advanced Sensing using Deep Learning

B.Sc. Mechanical Engineering

Florida Institute of Technology

📅 09/2012 – 09/2016

📍 Florida, United States

Graduated *Magna Cum Laude* — GPA 3.89/4.00 | Full scholarship

LANGUAGES

Spanish (native) | English (advanced) | Dutch (intermediate)