

Bella Nicholson

📍 Amsterdam, Netherlands

🔗 bellanich.github.io

in [bella-nicholson](#)

🔗 [bellanich](#)

🌐 American

Resourceful Machine Learning Engineer with 3+ years of experience in a diverse set of organizations, ranging from tech startups and scaleups to an establish tech company. A life-long learner with a passion for optimizing ML models for real-world applications on resource-constrained devices. Actively exploring the implications of efficient edge neural solutions.

EXPERIENCE

Machine Learning Engineer

Brenntag

📅 Nov 2023 – Present

📍 Amsterdam, Netherlands

At [the world's leading chemical distributor](#), I deployed and maintained ML products across [70+ countries](#). Thus far, I've:

- Migrated a virtual AI assistant (earning €30+ million in annual revenue) to a [more cost-effective and secure AWS](#) platform
- Developed a real-time [notification system](#) to monitor critical ML jobs and model metrics, [improving system visibility](#)
- Standardized quality controls across 15+ ML project components through the creation of a CLI package prototype

(Junior) AI Consultant

Deloitte Consulting

📅 Sept 2021 – Oct 2023

📍 Amsterdam, Netherlands

As a contracted ML engineer, I optimized and implemented ML solutions for diverse clients, delivering:

- Increased system robustness of a [Dutch e-classified ads platform's](#) "For You" page, introduced MLOps best practices
- Launched a self-paced, ML-focused coding training website to standardize and improve code quality across [Deloitte NL](#)
- Centralized large-scale model storage, experiment tracking across various environments for a [German steel conglomerate](#)

Research Thesis Intern

Crunchr

📅 Jan 2020 – Aug 2020

📍 Amsterdam, Netherlands

At [a people analytics platform](#), I conducted graph-based representation learning research for the [development of ML products](#):

- Built a proof of concept, one-off representation learning process to encode relational database entity information
- Demonstrated approach validity by applying deep neural networks to downstream classification tasks on process outputs

Computer Vision Intern

Cubelizer

📅 June 2017 – July 2017

📍 Madrid, Spain

As part of [a Google-backed edge computer vision startup](#), I improved customer detection 12% in retail space optimization:

- Developed a video stream-based object detection method in compliance with EU privacy regulations
- Applied image processing and classical machine learning techniques to low-resolution images

CERTIFICATIONS

Machine Learning Engineering for Production (MLOps) Specialization

DeepLearning.AI

📄 Curriculum

📅 Sept 2022

🔗 Certificate

EDUCATION

Master of Science, Artificial Intelligence

University of Amsterdam

📅 Sept 2018 – Dec 2020

📍 Amsterdam, Netherlands

- Courses on AI, including Deep Learning, Computer Vision, Natural Language Processing, and Reinforcement Learning
- Thesis on ["Interpretable Representation Learning for Relational Data"](#) in collaboration with Crunchr
- Cum laude (8.0/10.0)

Bachelor of Science, Biomedical Engineering

The College of New Jersey

📅 Sept 2014 – May 2018

📍 Ewing, New Jersey, USA

- Met national engineering standards by passing the [Fundamentals of Engineering Other Disciplines Exam](#)
- Magna cum laude (3.8/4.0)

PROJECTS

Pocket Multi-Modal Foundation Model

- Deployed a [custom embedded, vision-text foundation model](#) across various iOS devices (laptop, phone, tablet)
- Extended [an existing large language model hardware-optimization framework](#) to quantize a [new multi-modal model](#)
- Documented results and process in a [4-part blog post series](#)

Python Machine Learning Template

- Automated a comprehensive Python ML project setup process with [a project template](#) and [3 simple bash commands](#)
- Enabled streamlined project creation with pre-built tests, an automated build process, and auto-generated documentation

SKILLS

Programming languages & tooling

Python, Git (2016-present), Bash (2018-present), Terraform (2023-present), SQL (2019-present), Docker (2022-present)

MLOps platforms

Amazon Web Services (2021-present), Google Cloud Platform (2022-present), Databricks (2022-present), Azure DevOps Platform (2021-2022)

ML frameworks

PyTorch (2018-present), PySpark (2022-present), FastAPI (2021-present), Tensorflow (2021-2022), Keras (2022)

Languages



English



Spanish



German



Russian