Guus Bouwens

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LinkedIn @ Portfolio

Haarlem, The Netherlands

Summary

I am an experienced data scientist with a robust background in optimizing machine learning models.

Professional Experience

Al Engineering Intern at McDermott International, Ltd

| October 2024 - April 2025

The Hague, NL

- Optimized RAG System: created an evaluation dataset, implemented custom evaluation metrics, tested and implemented the best chunking methods, and added metadata for improved retrieval and response quality. Integrated hybrid retrieval and reranking techniques. All of this was done in a secure environment, ensuring no data leakage.
- Worked with Git, Python, Viktor CLI and Azure for CI/CD. Followed the Scrum Agile working method.

Al Engineering Intern at Invest-NL

| April 2024 - September 2024 | Amsterdam, NL

- Fine-tuned and integrated pretrained open-source LLM's like llama-3-70B to function as a classification model by annotating thousands of web scraped company descriptions. Significantly cut costs by optimizing API calls.
- Collaborated with teams in several investment areas such as robotics, batteries, and nuclear energy.
- Worked with Git, DBeaver, Python, Power BI and Azure for CI/CD. Followed the Scrum Agile working method.

Data Science Intern at Talpa eCommerce

| June 2023 – September 2023 Amsterdam, NL

- Optimized the recommendation system of auctioning websites by implementing new similarity measures.
- Created customer insights by utilizing Fourier transformations on big numerical data.
- Worked with Git, SQL, Python, Jenkins, Docker and AWS for CD4ML. Followed the Jira Agile working method.

Education

MSc. Data Science at Texas Tech University

| May 2025 - April 2026

Lubbock, TX

• Accepted a scholarship and will be attending on campus.

BSc. Econometrics and Data Science at VU Amsterdam

• Minor in Big Data, scoring 8/10.

BSc. Applied Physics at TU Delft

• Several best in class capstones scoring 10/10. (see Projects)

| September 2020 - April 2025

Amsterdam, NL

• GPA: 7.5/10 or 3.5/4

• EC: 168/180

Withdrew

| September 2019 - July 2020

Delft, NL

Pre-Uni Education at Sancta Maria Lyceum

| September 2012 – July 2018

Haarlem, NL

- Majored in Physics, Economics, Computer Science, Biology, Chemistry and the highest Math level.
- Graduation project: created a Quantum Tunneling experiment to be used Physics class, scoring a 8.5/10.

Skills

Coding: Python (NumPy, Pandas, Scikit-Learn, TensorFlow), SQL, Excel, Git, Microsoft Azure, GCP, AWS, R, Java, C++. Computer Science: Database Fundamentals, DSA, Sentiment Analysis, ML, Reinforcement and Deep Learning, AI. Economics: Macro, Micro, (Quant) Finance (quantdsl, ArcticDB, pymc3), Ethics, Investment & Portfolio Management. Math: Calculus, Linear Algebra, Numerical Methods, Probability, Multivariate Statistics, Econometrics. Communication: Academic Reporting & Presenting, LaTeX, Interpersonal Skills, Project Management, Collaboration. Language: Fluency in English (110/120 TOEFL) and Dutch (native). Beginner in French, German and Spanish.

Projects

- Website: Created a responsive and navigable portfolio website which details my skills and achievements.
- **Dashboard**: Created a dashboard that automatically analyses the sentiment of crypto coins, by scraping YouTube.
- School rank and salary relation: found using OLS, K-NN, and Monte Carlo methods.
- **Newsvendor problem**: Achieved a perfect score by using advanced simulations.
- Classifying financial news articles: Received the highest grade by pre-processing and feature engineering.

Certificates

Azure Data Scientist Associate | Microsoft Data Analytics | Google Data Structures and Algorithms | UC San Diego Machine Learning | University of Washington Deep Learning and NLP | DeepLearning.AI Applied Data Science with Python | University of Michigan SQL for Data Science | University of California (UC), Davis Recommender Systems | University of Minnesota Mathematics for Machine Learning | Imperial College London Artificial Intelligence in Healthcare | Stanford