

Guus Bouwens

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[LinkedIn](#) • [Portfolio](#) • [Kaggle](#) • [Github](#)

EDUCATION

Texas Tech University, Rawls College of Business

Lubbock, TX, USA

Master of Science in Data Science

Expected May 2026

- Recipient of two academic scholarships; **GPA: 4.0/4.0**
- Relevant Coursework: Big Data Strategy and Security, Business Intelligence, Simulation & Optimization, Applied AI

Vrije Universiteit Amsterdam, School of Business and Economics

Amsterdam, NL

Bachelor of Science in Econometrics and Data Science, Minor in Big Data

Sep. 2020 – March 2025

- Led three capstone projects that earned the highest marks in associated courses; **GPA: 3.5/4.0**
- Relevant Coursework: Multivariate Statistics, Linear Algebra, Calculus, Time Series, Machine Learning, Databases

PROFESSIONAL EXPERIENCE

McDermott International, Ltd

The Hague, NL

AI Engineering Intern

Oct. 2024 - April 2025

- **Boosted model accuracy 2x and speed 5x** by architecting an advanced RAG system with contextual chunking, hybrid retrieval, and reranking, deployed on **Azure** using **Python** and CI/CD pipelines.
- Architected a security-focused **evaluation framework with in-text citations** to guarantee response factuality, partnering with PhD researchers and project owners in an Agile workflow.

Invest-NL

Amsterdam, NL

AI Engineering Intern

April 2024 – Sep. 2024

- Collaborated with Deep Tech and Energy investment teams to fine-tune a Llama-3-70B model, boosting **accuracy from 60% to 95%** while cutting API costs through **output optimization**.
- Automated the MLOps lifecycle from data ingestion to deployment using **Python, Power BI, and Azure CI/CD**, enabling continuous model improvement and monitoring.

Talpa eCommerce

Amsterdam, NL

Data Science Intern

June 2023 - Sep. 2023

- **Boosted recommendation engine performance, increasing activity by 10%**, by including **cosine similarity** measures, informed by customer insights uncovered via **Fourier analysis** of multi-year behavioral data.
- **Engineered a scalable deployment** by containerizing the model with **Docker** and deploying on **AWS SageMaker** within a **Jira**-managed Agile workflow.

PROJECTS

- Developed a **real-time crypto sentiment dashboard** using automated web scraping and sentiment analysis.
- Applied signal processing to wearable pulse data of 1500 individuals to develop a Random Forest model, achieving a **heart rate prediction with MAE of 8.8 bpm**.
- Build an **autonomous essay-writing agent** using LangGraph, featuring persistent memory, live-streaming, and an interactive Gradio UI.
- Uncovered three core musical dimensions from a dataset of 3,090 songs by applying an **Orthogonal Factor Model**, creating a novel artist-mapping system.
- Developed a predictive model to **forecast salary based on school rank**, achieving 88% accuracy and a 6.9 MSE by evaluating OLS, K-NN, and Monte Carlo frameworks.
- Composed an **inventory optimization framework** for a bakery, leveraging Monte Carlo simulations to determine optimal stock levels by contrasting parametric and non-parametric demand models.
- Engineered a **text classification pipeline for financial news**, achieving a top F1-score of 0.315 through optimized TF-IDF vectorization and LSA feature engineering.

CERTIFICATES

Agents • Hugging Face (2025)

Artificial Intelligence in Healthcare • Stanford (2023)

Azure Data Scientist Associate • Microsoft (2023)

Data Analytics • Google (2023)

Machine Learning • University of Washington (2023)

Recommender Systems • University of Minnesota (2023)

Agentic AI and RAG • IBM (2025)

Applied Data Science with Python • U-Michigan (2023)

Deep Learning and NLP • DeepLearning.AI (2023)

Data Structures and Algorithms • UC San Diego (2023)

Math for Machine Learning • ICL (2023)

SQL for Data Science • University of California, Davis (2022)

SKILLS

Languages: Python (Scikit-learn, Pandas, NumPy, Matplotlib, PyTorch, TensorFlow), SQL, R

Techniques: Regression, Classification, NLP (Sentiment Analysis), Statistical Modeling, Time-Series Analysis (FFT)

Databases & Cloud: Relational (PostgreSQL, MySQL), NoSQL (MongoDB), AWS, Azure

Developer Tools: VSCode, Git, Docker, Jupyter Notebooks, DBeaver

Quantitative Foundations: Linear Algebra, Multivariate Statistics, Econometrics, Probability, Calculus, Analysis

Fluent languages: English ([110/120 TOEFL](#)), Dutch (native). **Beginner:** French, German, Spanish.