

# MICHAEL CASTELEIN

Dutch - American | mpcastelein@gmail.com | +1 7705706449  
linkedin.com/in/michael-castelein | github.com/mcastelein

## SUMMARY

Data scientist and engineer with strong background in econometrics, mathematics, and aerospace engineering. Experienced in machine learning, deep learning, NLP, and cloud-based data pipelines (Azure). Skilled in Python, SQL, and data visualization. Communicates effectively with cross-functional teams and supports data-driven decision making. Strong focus on delivering business value through sound judgment, prioritization of high-impact work, and professional collaboration.

## WORK HISTORY

- Data Engineer - Vintus - Rotterdam, NL** Apr 2024 – Sep 2024
- Developed and optimized cloud-native ETL pipelines on Azure using Python, SQL, and Azure Data Factory to automate ingestion and transformation of large-scale structured data
  - Built reusable data workflows and REST APIs to support client-facing dashboards and internal reporting pipelines
  - Worked with Azure Databricks for scalable data processing, data modeling, and feature engineering for machine learning pipelines
- Business Intelligence Analyst - HousingAnywhere - Rotterdam, NL** Sep 2022 – Sep 2023
- Created cloud-based interactive dashboards in Tableau and Mode Analytics for user behavior analysis, KPI tracking, customer service performance, and business operations insights
  - Performed complex data manipulation and feature engineering using SQL, BigQuery, and Python to support product analytics and strategic decision-making
  - Wrote optimized SQL and BigQuery queries to analyze user activity, revenue trends, and customer journey metrics
  - Collaborated on anomaly detection and fraud detection pipelines, supporting risk, compliance, and customer service teams
- Actuarial Co-Op - John Hancock - Boston, MA** Aug 2019 – Dec 2019
- Developed advanced Excel, VBA, and Python tools for insurance valuation, risk modeling, and regulatory reporting.
- Data Analytics Intern - Southwest Airlines - Dallas, TX** May 2019 – Sep 2019
- Built ETL pipelines and distributed dashboards using Alteryx and SQL for Boeing Aircraft maintenance compliance monitoring
  - Conducted anomaly detection and root cause analysis on system performance and reliability metrics

## EDUCATION

- Masters of Science in Econometrics (Quantitative Finance)**  
*Erasmus University, Rotterdam, The Netherlands* 2021 - 2025
- Bachelor of Science in Aerospace Engineering**  
*Minor in Japanese & International Studies | Georgia Institute of Technology, Atlanta, GA* 2016 - 2019
- Bachelor of Science in Mathematics**  
*University of North Georgia, Dahlonega, GA* 2013 - 2016
- Study Abroad**  
*Ireland (Limerick) - Summer 2017 | France (Metz) - Fall 2017 | Japan (Beppu) - Summer 2018*

## TECHNICAL SKILLS

**Languages:** Python, SQL, R, JavaScript, HTML, CSS, VBA  
**Libraries/Frameworks:** Pandas, NumPy, Scikit-learn, TensorFlow, PyTorch, Keras, Transformers, HuggingFace, Statsmodels, Matplotlib, Seaborn, GNNs  
**ML/DS Skills:** Data Science, Deep Learning, NLP, A/B Testing, Anomaly Detection, Fraud Detection, Time Series Forecasting, Feature Engineering, Model Tuning, EDA, Graph-based Algorithms  
**Cloud/MLOps:** Azure, BigQuery, Cloud-native platforms, Spark, Hadoop, Kubernetes, CI/CD, Docker, Git  
**Tools:** Tableau, Power BI, Mode Analytics, Alteryx, REST APIs, Google Apps Script, LaTeX  
**Databases:** PostgreSQL, Snowflake, Microsoft Access

## LEADERSHIP

- Founder and Chairman - Erasmus Table Tennis Association** 2022 - 2023  
**Chairman - Erasmus Badminton Association** 2021 - 2022
- Founded one and led a two separate associations, each with 100+ members; demonstrated professionalism, sound judgment, and effective communication in managing events, finances, and community partnerships.