

Contact

Ypenburgbocht 9-A303 2316 WB Leiden, Zuid-Holland Netherlands

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Socials

robkras.com GitHub: rbkrs Kaggle: robkraseu

Languages

Dutch – Native English – Bilingual German – Basic French – Basic

Certifications

English C1 Advanced
May 2018
Issued by Cambridge Assessment
International Education

Robin (R.P.M.) Kras

EDUCATION

Estimated finalisation Mid 2025

MSc Computer Science, Rijksuniversiteit Leiden

- Data Science & Artificial Intelligence specialization track

Dec 2023

BSc Computer Science, Vrije Universiteit Amsterdam

- Minor: Data Science

SKILLS

Programming: Python, C, C++, Assembly, SCALA

Technical skills: Keras, NumPy, Pandas, TensorFlow, PyTorch, (My)SQL, data manipulation, data visualization, machine learning, data science, reinforcement learning, GIT, web scraping, data mining, NLP, Hugging Face transformers, SciPy, Scikit-Learn, Librosa, CNN/RNN/GAN), NetworkX, spaCy

Personal skills: love of learning, time management, communication, adaptability

HOBBIES

Swimming, cooking, video games, working out

PROJECTS

Kaggle

Competition entries are regularly updated and stored on my domain (robkras.com).

Applied Skills & Techniques

Machine Learning

- Developed **supervised learning models** (XGBoost, kNN, Random Forest, Linear Regression) to predict rainfall and classify Titanic survival outcomes.
- **Optimized models** using GridSearchCV and KFold cross-validation, achieving improved accuracy and efficiency.
- Engineered new features, handled missing data, and applied **one-hot encoding &** label encoding for categorical variables.
- Trained and fine-tuned deep neural networks using TensorFlow/Keras.

Data Processing & Analysis

- Conducted Exploratory Data Analysis (EDA) using Seaborn & Matplotlib to identify trends and correlations.
- Applied Matplotlib and Seaborn to discover **variability and outliers** in numerical and categorical feature distributions.
- Cleaned and preprocessed datasets using Pandas & NumPy, ensuring high-quality input data
- Scaled numerical features using **StandardScaler** to improve model convergence.

Model Evaluation & Interpretability

- Assessed models with RMSE, R², MAE, accuracy, and ROC-AUC scores for performance benchmarking.
- Applied SHAP values for explainability and feature importance analysis.
- Used **SMOTE** to balance imbalanced datasets, improving prediction robustness.

Master's Thesis

I am conducting research on cutting-edge VLMs such as Llama3.2 and Molmo to assess their capabilities in drawing cross-modal associations. This work contributes to practical applications, such as improving tools for individuals with disabilities.