BORA BLAKE KARAPINAR

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Linkedin Profile
Github Profile

EDUCATION

Technical University of Darmstadt (Germany) | 2022 – Present

B.Sc. in Business Informatics (Wirtschaftsinformatik)
GPA: 2.3 (in German system)

PROFESSIONAL EXPERIENCE

Procter & Gamble (P&G) | Oct 2025 – March 2026

ML & Data Engineering Intern

- Analyzed historical sensor time-series data to statistically derive optimal operating conditions and identify behavioral clusters per machine
- Designed a JSON-based schema and interactive ipywidgets notebook enabling non-technical stakeholders to capture and maintain statistical baselines independently
- Conducted sensor-error correlation analysis for early fault detection; built dedicated visualization and validation tools to document findings
- Developed a structured error definition framework with boolean logic and weighted risk scoring, complemented by a no-code GUI for rule authoring
- Implemented a Docker-containerized live monitoring engine with dynamic loading of predefined sensor and error logic, optimized InfluxDB query consolidation, and structured SQLite alert persistence for dashboard integration

Technical University of Darmstadt | May 2023 – Present

Student Assistant (International Office "Europa+ / Unite!")

- Developing Excel/VBA workflows for Erasmus+ grants (used in internal audit ensuring EU-compliance)
- Management of document control and inter-department communication
- Performing data entry and validation for automated grant calculations

TECHNICAL PROFILE

- **Languages:** Python, Java, SQL, VBA, C++, R (learning)
- **Certificates:** Create Machine Learning Models in Microsoft Azure (Microsoft)
- **Tools:** Power BI, Excel, Numpy, Pandas, Matplotlib, Pytorch, Spark & Databricks (learning), Spring Boot, CUDA
- **Coursework:**
  - **BA:** Econometrics; Financial & Cost Accounting; Corporate Finance; Business Process Modeling; IAS1; Corporate Valuation Seminar (DCF, Multiples)
  - **CS:** Introduction to Artificial Intelligence; Database Systems; Parallel Computing
- **Languages (Spoken):** Turkish (Native), English (C1), German (C1–C2)

PROJECTS

Circle Internet Group IPO Valuation Analysis | Seminar Paper

- Project link
- Built an FCFE/DCF model with three-scenario framework, replacing conventional FCFF due to Circle's 99% revenue dependence on interest-sensitive reserve income
- Reconstructed missing circulation/market size data from SEC filings by processing raw daily circulation data from public sources via Python
- Investigated rapid customer loss in a pre-IPO acquisition, tracing the decline to a collapse in a third-party protocol holding 95%+ of the product's assets, ruling out operational causes
- Identified a structural cost dependency consuming 61% of revenue tied to third-party market dynamics, and modeled how varying market positioning scenarios translate into divergent cost trajectories and valuation outcomes

Power BI and SQL Dashboard Development | Individual Project

- Project link
- Built SQL database from raw data and created interactive dashboards in Power BI
- Automated data cleansing with Python scripts and implemented SQL queries for business metrics

VBA Audit Scripts | Individual Project

- Project link
- Used VBA to identify data mismatches for hackathon task

Business Process Automation App (Credit Assessment) — Individual Project

- Project link
- Developed backend with Spring Boot and Flowable BPMN engine

Celestial Body Simulation – Parallel Programming (TU Darmstadt) — Coursework

- Project link
- Built N-body simulation in C++ with OpenMP parallelization and quadtree spatial decomposition
- Accelerated computation using custom CUDA kernels with efficient memory management