

MIKÁ MÜLLER

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EDUCATION

University of Göttingen

B.Sc. Applied Data Science

Göttingen, Germany

Oct 2023 - Expected: Mar 2026

- Accelerated track: Completing degree in 5 instead of 6 semesters

Wilhelm-Gymnasium

High School Diploma (Abitur: 1.4 / 1.0 is best)

Braunschweig, Germany

2021 - 2023

St. Brickings Vocational School

Exchange Year

Belturbet, Ireland

2020 - 2021

EXPERIENCE

Gascade

Working Student - Software Engineering & AI

Kassel, Germany / Remote

Apr 2024 - Present

- Architected AI pipelines and systems via Azure to optimize talent pool management.
- Designed and deployed custom applications tailored for operational business departments.
- Automated and digitized internal workflows to drive sustainable operational efficiency.
- Expanded internal AI copilots and formulated strategies for seamless LLM integration.

Jacobs GmbH

Working Student - Data Management

Würzburg, Germany / Remote

Jan 2024 - Mar 2024

- Managed, maintained, and optimized data structures and relational databases.
- Ensured high data integrity and continuously monitored system availability and performance.

Umbrella Mobility

Internship - Data & Software Engineering

Hamburg, Germany / Remote

Apr 2023 - Aug 2023

- Engineered an application for automated data collection within the mobility sector.
- Implemented automated reporting tools to analyze and track real-time vehicle availability.
- Managed comprehensive data pipelines and optimized existing reporting workflows.

PROJECTS & ACHIEVEMENTS

BURA – 3D-Printed Reconnaissance Drone

Personal Project

- End-to-end design and engineering of a modular, fully 3D-printed long-range reconnaissance drone achieving over 2 hours of flight time.
- Architected a system optimized for low-latency computer vision workloads and complex autonomous mission profiles (waypoints, dynamic loitering, failsafes).
- Iteratively optimized the UAV (V4) via rapid prototyping, resulting in a highly efficient drone (<1.5 kg AUW) featuring redundant RF links and a high payload capacity (1 kg).

Robust Vehicle Tracking & Hierarchical Verification [\[Report\]](#)

- Developed a hierarchical verification framework for YOLOv11 to enhance situational awareness in safety-critical surveillance scenarios (fog, occlusion).
- Engineered a "Unified-Compact-ROI" pipeline in PyTorch for efficient feature extraction and hard-negative mining without retraining the base model.
- Achieved an **MOTA increase of +18.7%** on the VisDrone benchmark and reduced False Negatives by 27.6% by implementing a custom "Waterfall-Rescue" logic.

Anki Automation – AI-Integrated Knowledge Pipeline [\[Github\]](#)

Personal Project

- Built a full-stack application to automate knowledge management processes by integrating LLM workflows into the Anki ecosystem via REST APIs.
- Implemented a YAML-to-HTML rendering engine supporting various data types (L^AT_EX, Markdown, syntax highlighting) and automated bidirectional flashcard generation.
- Released as a standalone tool, featuring a custom prompt manager and dynamic CSS templating for professional data visualization.

Synthetic Data Generation Tool

Personal Project

- Engineered an Unreal Engine plugin for the automated generation of pixel-perfect annotated training data for computer vision models.
- Enabled the training of robust vision models (e.g., YOLO) without the need for expensive and resource-intensive real-world data collection.
- Simulated diverse camera parameters, weather conditions, and environments, exporting annotations such as Axis/Object-Aligned Bounding Boxes, segmentation masks, and 3D Bounding Boxes.

SKILLS & ABILITIES

Programming & Data:	C++, Python (PyTorch, Pandas, NumPy, Scikit-learn), SQL, Java, R, Excel
Tools & Frameworks:	ROS2, TensorRT, ONNX, Docker, Git, HuggingFace, Azure, Unreal Engine, L ^A T _E X
Operating Systems:	Linux, Windows, TempleOS
Languages:	German (Native), English (Professional Working Proficiency), French (Basic)
Soft Skills:	Public Speaking, Leadership, Innovation Management, Teaching & Training
Hardware:	3D Printing, CAD Design, RF Links, Digital/Analog Video Processing