Piet Vinnbruck

github.com/pvinnbru | pietvinnbruck.com | (+49) 1578 296 1081 | contact@pietvinnbruck.com

Education

Master of Science, Information Systems - University of Münster Apr. 2024 - Present Münster, Germany Current GPA: 1.2 . Specializing in Software Engineering and Data Science, with a focus on Machine Learning. Expected Graduation: October 2026 Bachelor of Science, Information Systems - University of Münster Oct. 2020 - Mar. 2024 Graduated as top student of the Winter Semester 2023/24 class with a GPA of 1.7. Münster, Germany Completed an exchange semester at Griffith University, Australia. Thesis: Categorization of Affordances for Sustainable Practices - later co-authored a research paper based on this work, submitted to the 31st European Conference on Information Systems (ECIS 2024). Training for IT-Systems Management Assistant - HKS Informatik GmbH Sep. 2017 - Jan. 2020 Final Project: Designed and implemented an automated data transmission workflow using Python Moers, Germany & Nextcloud, improving efficiency and reducing manual workload. A Levels - Julius Stursberg Gymnasium Jun. 2015 - Mar. 2017 GPA: 1.9 Neukirchen-Vluyn, Germany Experience **Self-Employed -** *Software Developer* Oct. 2024 - Present Developed a web app automation for a leading logistics company. Münster, Germany SAP SE - Working Student Data Center Management Jan. 2024 - Jun. 2024 Integrated data and performed analysis of relevant cost metrics in data center management. St. Leon Rot, Germany Collaborated with cross-functional teams to enhance data integration strategies. Deloitte Touche Tohmatsu Limited - Internship in Technology Audit Mar. 2023 – Jun. 2023 Conducted IT security risk assessments and workflow audits for a DAX-listed pharmaceutical company. Düsseldorf, Germany zeb GmbH - Working Student in IT-Development Apr. 2022 – Oct. 2022 Developed internal software with Java and JavaScript. Münster, Germany Enhanced technical documentation to improve team efficiency and software quality. univativ GmbH - IT-Support (Westfälische Provinzial Versicherung AG) Jun. 2020 - Oct. 2020 Münster, Germany

Provided technical support for employees, troubleshooting hardware and software issues.

Projects and Courses

DiveFinder: Scuba Diving Recommendation System

- Developed a web-based recommender system that suggests dive sites based on user preferences and interactions.
- Data Fusion of 4,395 dive sites from PADI.com with marine life data from GBIF.org using KDTree Algorithm.
- Implemented Contend-Based-Filtering to provide personalized dive recommendations, optimizing sparse user data.

Automation of CO₂ Calculation for a Leading Logistics Company

- Developed a Flask-based backend for automated CO₂ emission calculations in freight transport.
- Designed and optimized a MySQL database for efficient data storage and retrieval.
- Built and tested REST APIs for seamless integration with a streamlit-based web-dashboard.
- Deployed and managed the application in a Docker environment for scalability and efficiency.

Face Recognition with a Siamese CNN

- Developed a lightweight Siamese CNN (<200K parameters) for facial verification, implemented in PyTorch and optimized with Optuna.
- Trained on synthetic face data with Contrastive Loss and Triplet Loss, comparing their effectiveness on the LFW-Cropped dataset.
- Designed end-to-end pipelines for data augmentation, model training, and evaluation in Jupyter Notebooks.

Development of a GUI for an Epidemic Modeling App

- Designed and implemented a web-based GUI for configuring epidemic simulations, enabling intuitive TOML file generation.
- Developed with Angular, TypeScript, HTML/CSS, and integrated with a MongoDB database to manage configuration data.

Computer and Data Science Lecture Courses (University of Münster):

Attended: Data Structures and Algorithms, Software Engineering, Programming, Computer Structures and Operating Systems, Data Analysis and Simulation, Data and Probability, Mathematics for Information Systems, Operations Research, Introduction to Computer Graphics, Advanced Concepts of Software Engineering, Data Integration, Logic Specification and Programming, Data Analytics I/II

Skills

Languages German (native), English (fluent), French (B2) Development

Python, Java, R, SQL, MS Office, COBOL, HTML/CSS/JS,TCP/IP, REST, Linux, Angular, Flask, Docker, Git, Pytest Pandas, NumPy, TensorFlow, PyTorch, Jupyter, Matplotlib Data Science

Winter 2024/25

Winter 2024/25

Summer 2024

Summer 2023

2020 - Present