Nazmican Calik

Munich/Germany | +49 1631356996
nazmican@pm.me
github | linkedin

Summary

Machine Learning Engineer with expertise in computer vision and deep learning, specializing in video generation and 3D data processing. Experienced in developing generative vision models, real-time AI systems, and integrating ML solutions with production environments.

Experience

VidLab7 GmbH - Machine Learning Engineer

06/24-present / Munich

- Designed and deployed an in-house lip-sync pipeline using GANs and transformer models, enabling video generation with high temporal consistency and realistic mouth movements.
- Developed comprehensive dataset collection and cleaning pipeline with image quality assessment and audio sync correction, improving training data quality by 40%.
- Built a real-time responsive AI Agent (24 FPS) with document processing increasing customer engagement by 30%.

Filics GmbH - Computer Vision Engineer

10/22-06/24 / Munich

- Implemented robust detection and tracking system for multiple load carriers using ML and classical CV, achieving 95% detection accuracy in challenging warehouse environments.
- Integrated computer vision modules with ROS2 for robotics applications, reducing detection and pallet entry time (using SVMs) by 60%.

defia Software - Working Student

10/18-07/19 / Istanbul

- Full stack development of a factory tool tracking app with ionic used by 50+ workers, streamlining equipment monitoring.

macio GmbH - Intern

06/18-10/18 / Kiel

- Developed an embedded OS in C++/Qt for commercial dishwashers, implementing user interface and control systems.
- Designed and implemented a real-time meeting room status tracking system with occupancy detection and booking using JavaScript and React.

Education

Technical University of Munich - M.Sc. Computer Science

2019-2022

- Final Grade: 1.9 (1.0 being highest distinction in German system)
- Specialized in Computer Vision, Machine Learning for 3D Geometry, and Deep Learning.
- Recipient of DAAD Masters Scholarship.

Bogazici University - B.Sc. Computer Engineering

2015-2019

- Final Grade: 3.4/4.0
- Specialized in Software Engineering and Computer Vision

Skills

Programming Languages	***Experienced:*** Python | C++ ***Familiar:*** SQL | Javascript | R
Machine Learning	PyTorch | Computer Vision | CNNs | GANs | Transformers | MLOps | 3D Data | OpenCV
Software Development	Git | Linux | CI/CD | REST API | GCP | Docker | Wandb | Model Deployment | ROS2
Languages	***Native:*** Turkish ***Fluent:*** English, German

Projects

- **Convolution Augmented Transformers for 3D Data Processing** (PyTorch) - Developed a novel convolutional block for self-attention mechanisms, improving point cloud understanding on ModelNet and ShapeNet datasets.
- **3D Object Part Segmentation using Self-supervised Learning** (PyTorch) - Created a model for object part segmentation using SimCLR and PointNet on ShapeNet, achieving comparable results to supervised approaches.
- **Deep Neural Network Based Action Recognition with Transformers** (PyTorch) - Developed a transformer model to detect actions in Jester, Something Something v2 and Kinetics datasets.

Awards & Hackathons

- **DAAD Masters Scholarship Grantee** (2019-2022)
- **Pisano Hackathon 1st Prize** (2018) - Developed backend of a webapp to help users sort their paperwork according to topological order using MongoDB and Express Framework.
- **Accenture Global Hackathon 3rd Prize** (2017) - Developed the frontend and backend of a webapp using AngularJs.