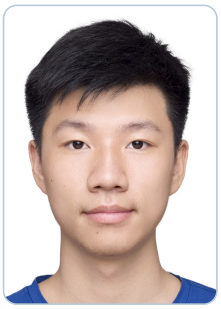
Nuhu Peng

Electrical Engineering and Information Technology Student | TUM

Munich, Germany
nupe1031@gmail.com



PROFILE

Electrical Engineering undergraduate at TUM with hands-on experience in sensor testing, Python-based data analysis, industrial machine vision, simulation and model evaluation.

EDUCATION

Technical University of Munich (TUM) 10/2023 – Present
B.Sc. Electrical Engineering and Information Technology (in progress)

International School of Stuttgart 08/2020 – 06/2022
International Baccalaureate Diploma (IB) · 39/45 points

PROFESSIONAL EXPERIENCE

Sensor Technology and Measurement Intern 03/2026 – 05/2026
GEIRI Europe GmbH | Berlin, Germany

- Conducted experimental measurements on thin-film force sensors under varying mechanical loads and temperatures.
- Analysed and visualised measurement data with Python to investigate sensor characteristics and measurement deviations.
- Investigated temperature effects, hysteresis and response delays; evaluated approaches to temperature compensation.

Technical Intern – Traffic Simulation and 3D Modelling 08/2025 – 09/2025
Xiangjiang Laboratory | Hunan, China

- Edited and rigged 3D vehicle models in Blender for subsequent use in CARLA simulations.
- Modelled a real-world intersection in SUMO and examined traffic signal timings using the Webster method.

Software Engineering Intern 04/2023 – 06/2023
Truking Technology Limited | Hunan, China

- Adjusted existing image-processing programs in MVTec HALCON (HDevelop), including grayscale thresholds and image preprocessing for foreign-particle detection in liquid pharmaceuticals.

PROJECT EXPERIENCE

Vehicle Detection and Model Evaluation with YOLO11
Technical University of Munich | 2026

- Evaluated four YOLO11 configurations (YOLO11n/s; 640/960 px) using precision, recall, mAP and inference speed.
- Analysed false positives and missed detections using precision–recall and F1 curves, confidence thresholds, and ground-truth comparisons.
- Consolidated results in a Jupyter Notebook; selected YOLO11s (960 px), achieving 0.7687 validation mAP50–95.

TECHNICAL SKILLS

Programming	Python · C · MATLAB · VHDL
Computer Vision & ML	MVTec HALCON · Ultralytics YOLO · PyTorch · Jupyter
Tools & Simulation	SUMO · CARLA · Blender · Vivado · Git

LANGUAGES

Chinese (Native) · German (C1) · English (C1)