CHUNPO WU

AI / Computer Vision Engineer

CONTACT

+49 15252633669

chunpo.wu@uni-konstanz.de

Gustav-Schwab-Str 9, Konstanz, Germany,78467

ABOUT ME

M.Sc. Computer Science student at University of Konstanz with strong experience in computer vision, deep learning, and real-time systems. Skilled in deploying AI models on edge devices and large-scale data pipelines.

SKILLS

Computer Vision

Python&JAX

Virtual Reality

SLAM

Autonomous Robots

Leadership

LANGUAGES

Chinese (Native)

English (C1)

GERMAN (A2)

EDUCATION

M.Sc. Computer and Information Science
University of Konstanz 2025 – Present

- Focus on computer vision, deep learning, and robotics
- Relevant topics: SLAM, machine learning, real-time systems
- Involved in E-DAVID program with emphasis on AI-driven data analysis

B.Sc. Data Science and Big Data Technology
Shandong Jiaotong University 2021 - 2025

- GPA: 88.97/100 (Top 2/118)
- Awards: National Inspirational Scholarship; Shandong Outstanding Student
- Competitions: Huawei Kunpeng Innovation Competition (Provincial 2nd Prize), Lanqiao Cup (National Excellence), AI Competition (Provincial Prize)

PROJECT

Railway Safety Monitoring System
China Railway 03.2023 - 12.2023

- Built real-time monitoring system using 30+ RTSP streams per site
- Deployed AI models on Jetson edge devices with Kafka pipeline
- Implemented YOLOv7, SVM, and OCR for equipment state detection

Drone-Based Railway Inspection System
CHN Energy 12.2024 - 05.2025

- Developed defect detection system using UAV image/video data
- Applied Qwen2.5-VL model for visual reasoning and defect localization
- Built knowledge graph for equipment fault analysis

Autonomous Drone Navigation & Target Tracking
Bachelor's Thesis 01.2025- 06.2025

- Implemented real-time face tracking using YOLOv11
- Integrated DepthAnything v2 for obstacle avoidance
- Built end-to-end pipeline from video streaming to control
- Achieved autonomous navigation based on visual feedback

Algorithm Engineer Intern
Youxiangtu Intelligent Technology 06.2024- 09.2024

- Researched remote sensing object detection algorithms
- Explored Graph Neural Network methods

Web Engineer Intern
Baigong Information Technology 06.2025- 09.2025

- Developed backend and frontend for monitoring platform
- Designed APIs and collaborated with engineering teams

PUBLICATION

Lightweight Insulator Defect Detection Algorithm Based on UAV Perspective

- Proposed a lightweight deep learning model for insulator defect detection in UAV images
- Addressed small-object detection and complex background challenges
- Improved real-time performance for edge-device deployment
- Published in Journal of Beijing University of Aeronautics and Astronautics (2025)