Yaxuan Huang

yaxuanhyx.huang@gmail.com

Bahnhofstraße 8, 71672, Marbach, Germany

(+49) 176 4341 8089

https://yaxuan-7.github.io/
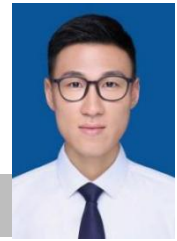
EDUCATION

04/2021 - 03/2024   **Technical University of Munich**

M.Sc in Energy and Process Engineering   GPA: 1.7

Focused Courses: Machine Learning, Matlab, Energy Engineering, Optimization, etc.

08/2012 - 07/2016   **Zhejiang University**

B.Eng in Renewable Energy Science & Engineering   GPA: 2.2

ACADEMIC EXPERIENCE

09/2023 - 02/2024   **External Master Thesis in RNA Digital Solutions GmbH:**
Transformer-based Retrieval Algorithm for 3D Mechanical Parts.

Developed a semi-automatic algorithm to create a dataset of 33,000 CAD files

Created a Transformer-based Masked Autoencoder for self-supervised learning, achieving over 95% accuracy in 3D parts retrieval.

09/2022 - 05/2023   **Semester Thesis: Creation of a Lane Map for Self-Driving using Computer Vision.**

Implemented computer vision techniques to extract lane information from satellite imagery.

Conducted comparative analysis of various computer vision methods for lane detection.

11/2015 - 06/2016   **Bachelor Thesis: Study on Mercury Removal in a Raw Mill.**

PROFESSIONAL EXPERIENCE

06/2023 - present   **RNA Digital Solutions GmbH**   ----**AI Engineer (Intern)**

Developed and refined 3D parts retrieval algorithms using Masked Autoencoders, enhancing system accuracy and efficiency.

Developed a commercial-ready web application, separating front-end and back-end functionalities, deploying neural network models on AWS, streamlining the workflow.

06/2022 - 11/2022   **CATL - Intelligent Manufacturing Department**   ----**Algorithm Engineer (Intern)**

Deployed intelligent CCD-Camera detection systems for lithium battery production lines.

Optimized vision algorithms using production data analysis, significantly reducing overkill rates by 30%.

05/2017 - 03/2021   **Beijing Mooyee Technology Co., Ltd. (Startup)**   ----**Co-founder & CTO**

Led R&D in atomization technology, achieving over 20 patent applications.

Oversaw the development of 'Air Faucet' water-saving products.

07/2016 - 04/2017   **Tianjin Lishen Li-ion Battery Co., Ltd.**   ----**R&D Engineer**

Designed and developed lithium-ion battery structures.

CORE COMPETENCIES & LANGUAGES

Programming & Scripting: Python, MATLAB, C++, HTML, CSS, JavaScript

Specializations: Machine Learning, Deep Learning, Computer Vision, Data Engineering

Development&Deployment: Git, SQL, RDBMS, Django, Flask, Node.js, React, AWS, Docker, Kubernetes

Language: Native in Chinese, Fluent in English (IELTS 6.5), Fluent German (B2)

Soft Skills: Self-Motivation, Team Work, Structured Work, Excellent Communication Skills