

# YUHAO WANG

## Data Scientist

📍 Munich, Germany    🌐 yuhao.de    🔗 <https://github.com/wang-yuhao>



## EXPERIENCE

### Data Engineer

#### Serviceplan Group

📅 Jun.2023 - Present    📍 Munich, Germany

- ML/LLM/Python/R/Tensorflow/PyTorch/Bigdata/Cloud
- Researched and evaluated advanced ML, LLM, and generative AI models, proposing innovative applications to expand project capabilities.
- Implemented, optimized, and deployed state-of-the-art ML models, enhancing project efficiency and delivering insights through manager reports and presentations.
- Developed ML models for emotion recognition and media data processing; built scalable data pipelines and dashboards, and automated integration and deployment to improve efficiency.
- Managed backend infrastructure (CPU/GPU servers, databases, networks) to ensure stability, scalability, and continuous service improvements.
- Facilitated team growth by supporting recruitment, onboarding, and organizing meetings and events to maintain a cohesive team environment.

### Junior Data Engineer

#### Serviceplan Group

📅 Sep.2021 - Jun.2023    📍 Munich, Germany

- Python/R/Tensorflow/PyTorch/BigData/ML/Docker/DB
- Implement latest AI/ML models in emotion and media data processing and analysis.
- Develop and maintain data pipelines for daily generated Big Data, analyze and visualize statistics using individual dashboards.

### Student Worker: Full Stack Web Developer

#### secunet Security Networks AG

📅 Sep.2020 - Apr. 2021    📍 Munich, Germany

- Angular/NodeJS/Express/Bootstrap/CI/CD
- Independent construction of a demonstrator, this demonstration shows how Protect4use can be integrated into a web service.

### Student Worker: Full Stack Web Developer

#### Media Performance GmbH

📅 Oct.2019 - Apr. 2020    📍 Munich, Germany

- NodeJS/HTML/Express/Bootstrap/MongoDB/Cloud
- Independently build an e-commerce platform to sell German products to Chinese customers.

## EDUCATION

### M.Sc. in Computer Science (Data Science)

#### Ludwig-Maximilians-Universität München

📅 2018-2021    📍 Munich, Germany

- 2.0/1.0

### Intercultural Communication Certificate Program

#### Ludwig-Maximilians-Universität München

📅 2019-2020    📍 Munich, Germany

- 1.3/1.0

### B.Sc. in Computer Science

#### West Anhui University

📅 2012-2016    📍 Anhui, China

- 85/100 (class president / top 3)

## AWARDS AND HONORS

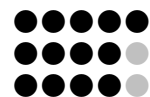
- Allianz scholarship(2021)
- Germany scholarship(2020)
- Excellent Student Scholarship(2016)
- Excellent Student Scholarship(2015)

## LANGUAGE

Chinesisch(C2)

Englisch(C1)

Deutsch(C1)



## TECHNICAL SKILLS

ML/LLM/PyTorch/Tensorflow

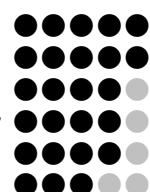
Python/API/Pandas/MongoDB

Polars/JS/ MySQL/NGINX

R/Rshiny/React/HTML/Docker

Latex/Linux/Nodejs/Influxdb

C/C++/Rust/PowerBI



# PROJECTS

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## Persona AI

### ML/LLM/Python/Pytorch/Tensorflow/MongoDB

📅 Jan. 2024 – Present

📍 Munich, Germany

- Create a cutting-edge Generative AI server tailored for specialized business consulting needs by leveraging the latest advancements in large language models. This includes designing, developing, optimizing, and deploying a sophisticated infrastructure for high-quality question-answering, text-to-image, image-to-text, and text-to-video generation capabilities.

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## Emotion Engine: Germany's first database of emotions

### ML/Python/Pytorch/Tensorflow/FastAPI/Cloud

📅 Jan. 2022 – Present

📍 Munich, Germany

- <https://www.mediaplus.com/de/landingpages/emotion-engine.html>
- Emotion Engine is the new tool for advertisers, market research and agencies to measure, analyze and optimize the emotional impact of communication in a cross-media mix.

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## Samba TV: A real-time big data processing platform

### Big Data/Python/Pandas/Dash/MongoDB/SQL/Docker

📅 Oct. 2021 – Apr. 2023

📍 Munich, Germany

- Process and analyze massive amounts of data watched by millions of smart TV users in Germany every day. Track the number of viewers per second of each program on each TV station and online video platform in real time. Analyze the net and gross ranges of advertising coverage, as well as the differential impact on advertising audiences of different ages, genders, and incomes.

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## MP Realtime Report: An Advertising Market Analysis Dashboard

### Python/R-Shiny/Docker/MongoDB/MYSQL

📅 Sep. 2022 – Sep. 2023

📍 Munich, Germany

- Process the revenue data of various advertising platforms in the German advertising market over the years, and summarize and analyze the data changes under different features.

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## Implementation of a real-time asset database based on flow data

### Python/MySQL/Influxdb/MongoDB

📅 Apr. 2020 – Jul. 2020

📍 Munich, Germany

- A concept and prototypical implementation of a realtime asset database using the latest technology to process as many flows as possible in realtime and visualize active devices on the network.

# MOOC

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## Neuroscience

### edX

📅 2023 - present

📍 Online

- Cellular Mechanisms of Brain Function (EPFL)
- Fundamentals of Neuroscience (Harvard)

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# THESIS

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## Master thesis: On the topological property of dynamic transaction graph (BTC/ETH)

### Python/Pytorch/Blockchain/Flink/Cloud

📅 Oct.2020 – Jul.2021

📍 Munich, Germany

- Explore the network dynamics behind Blockchain graphs, and use TDA (topological data analysis) to analyze dynamic transactions through actual BTC and Ethereum blockchain data sets.

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## Seminar Thesis: Recent Developments in Robustness against Adversarial Perturbation

### ML/DL/Markdown/Latex

📅 Apr.2019 – Jul.2019

📍 Munich, Germany

- Introduce and compare the previous approach and the advanced approach against the Adversarial Perturbation in deep learning in recent years.

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# TRAINING

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## Link Prediction for Knowledge Graphs

### Python/Pytorch/TensorFlow/CI/CD

📅 Apr.2019 – Jul.2019

📍 Munich, Germany

- Predicting the existence (or the probability) Models binary relations as a tensor of existence) of edges in the graph. Explore the strengths and weaknesses of each model, find possible reasons for errors.

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## mlrPlayground

### R/R shiny/HTML

📅 Oct.2018 – Apr.2019

📍 Munich, Germany

- Link: <https://sebastian-gruber.shinyapps.io/mlrPlayground/>
- Designing an interactive web application allowing the user to explore different kinds of machine learning datasets on predefined.