Manuel Oelmaier

Eching, Germany +49 1708319223 manuel@oelmaier.eu
linkedin.com/in/manuel-oelmaier manueloelmaier.de github.com/manuel-Oelmaier

Profile

Computer Science student at the Technical University of Munich specializing in AI. Experienced in fine-tuning transformer models, building full-stack applications, and developing practical AI tools. Skilled in Python, Java, and Bash. Passionate about responsible AI development, model evaluation, and creating solutions that bridge technical innovation with real-world impact.

Education

Bachelor of Science in Computer Science 2021 – 2025
Technical University of Munich, Germany

- Focus: Machine Learning, AI, Software Development
- Relevant coursework: Praktikum Next Gen AI, Ethics in Artificial Intelligence, Fundamentals of Programming

Abitur 2013 – 2021
Oskar-Maria-Graf Gymnasium, Germany

- Focus on mathematics and computer science
- *Seminar paper:* Implementation of a KI based on the Minimax algorithm for a self-created game (before AI hype)

Skills

Technical: Python, Java, JavaScript/TypeScript, HTML, CSS, C/C++, Bash, SQL & MongoDB
Frameworks / Tools: PyTorch, Git, Linux, Hugging Face
Areas of Interest: Artificial Intelligence, Machine Learning, Software Engineering
Languages: German, English (B2)
Soft Skills: Problem-Solving, Communication, Teamwork

latest Projects

Praktikum Next Gen AI: Finetuning an AI Model 2025
- Fine-tuned transformer-based models for generating Python code.
- Set up an automated pipeline to evaluate models on multiple test cases.
- Improved model performance from 40% to 75% on code generation tasks.
- Published the model as a Visual Studio Code extension, enabling users to leverage AI capabilities directly within their coding environment.

Learning Website for Theoretical Informatics 2025
- Collected all multiple-choice questions for the theoretical informatics course at TUM.
- Developed a web-based platform for interactive learning and self-assessment.

Chess AI to Mirror My Playing Style 2025 – Ongoing
- Collected all personal games from Lichess for training data.
- Converted each game into pairs of (board position, next move) and stored in a database.
- Currently training a neural network to predict my next move based on the board position.

Extracurricular Activities

- Chess youth trainer at SC Eching: organized engaging sessions for children.
- Active reader of non-fiction, focusing on philosophy, ethics, and social criticism