

# Daniel Pavlov

[daniel.pavlov@gmx.de](mailto:daniel.pavlov@gmx.de) | [linkedin.com/in/pvlov](https://www.linkedin.com/in/pvlov) | [github.com/pvlov](https://github.com/pvlov)

## EDUCATION

### Technical University of Munich

*Bachelor of Science in Computer Science, Minor in Medicine*

Oct. 2022 – Oct. 2026

*Munich, Germany*

## EXPERIENCE

### Junior Software Engineer

*Check24 Vergleichsportal GmbH*

Mar. 2025 – Now

*Munich, Germany*

- **Architected and implemented a greenfield security microservice** from scratch, developing a custom, non-blocking client for ClamAV using Project Reactor to ensure high-throughput scanning.
- Configured and automated the whole CI/CD lifecycle using **Jenkins** to deploy the service to **Kubernetes**, including publishing **OpenAPI** specs.
- Established operational visibility by building **Grafana** dashboards to monitor service health, request latency, and error rates in real-time.

### Working Student Software Engineering

*Check24 Vergleichsportal GmbH*

Jan. 2024 – Feb. 2025

*Munich, Germany*

- Migrated four core, revenue-generating services to **Spring Boot 3** and **Java 21**, achieving **zero downtime**.
- **Reduced latency for critical application queries by 90%** by designing and implementing a custom, multi-layered **caching** framework.
- Promoted to Junior Software Engineer as a student based on **high-impact contributions** and performance while finishing up my studies.

### Teaching Assistant (Course Instructor & Tutor)

*Technical University of Munich*

Oct. 2023 – Mar. 2025

*Munich, Germany*

- Course Instructor and Tutor for a **1,400-student programming course**; authored lecture slides and homework exercises that were adopted as official course material for all subsequent semesters.
- Designed and conducted weekly tutorials for core CS courses in **Java** (OOP, I/O, Streams, Concurrency) and **OCaml** (Functional Programming, Formal Verification) **receiving top student evaluations**.

## PUBLICATIONS

### EEG-Based Brain-Computer Interface for a Tetraplegic Individual Using Motor Imagery for Cybathlon 2024

*11th International BCI Meeting, Banff, Canada*

Co-Author on scientific abstract and poster, DOI: [10.3217/978-3-99161-050-2-000](https://doi.org/10.3217/978-3-99161-050-2-000)

## PROJECTS & ACHIEVEMENTS

### N/avi

[github.com/pvlov/avi-case](https://github.com/pvlov/avi-case)

- **Winning project of CDTM Hacks 2025**; presented as a demo station at the opening of the **OpenAI** Germany office
- Developed the **NextJS** backend using the **Vertex AI Gemini API** to perform OCR and structured data extraction on medical documents. Implemented concurrent processing and retry logic to maximize speed and reliability.

## EXTRACURRICULAR ACTIVITIES

### Student Researcher and Board Member

*neuroTUM e.V.*

Apr. 2024 – Now

*Munich, Germany*

- As **Board Member** (since May 2025), lead 60+ members across three R&D organizations ([neuroTUM](#), [OpenHardware](#), [BioMatrix](#)) focused on neuro-technology, robotics, hardware and machine learning.
- Single-handedly overhauled the BCI project's **Python** codebase, introducing a **modular architecture**, automated testing, and a CI pipeline with **GitHub Actions** to transform it into a stable, collaborative platform.
- Developed real-time feedback web-app using **Python** and **Flask** for the pilot to help them control the BCI during the competition