Stylianos Psychias

https://psychias.github.io/ | stelios.psychias@gmail.com | www.linkedin : stylianos-psychias

Summary

Enthusiastic master's student in Computer Linguistics and Neuroinformatics with a solid foundation in machine learning, data science, deep learning and natural language processing. Experienced in both academic and industry settings, with strong skills in programming, statistical analysis, and full-stack development. Seeking to apply my expertise in research and development roles gained from both the coursework and personal projects to real-world challenges as AI research engineer.

Education

BSc Computer Linguistics and Computational Science, University of Zurich *2020-2024*
Grade: 5.1 out of 6

- Relevant Courses: Machine Learning, Mathematical Foundations of Machine Learning, Programming Techniques, Advanced Programming Techniques, Database Systems, Introduction to Data Science
- Bachelor Thesis: Sentiment Analysis - Comparative study on different ML methods over the last decade (Grade: 5.5 out of 6)
- Completed Stanford University's intensive CS224N course on Natural Language Processing with Deep Learning,summer 2024 which covered key NLP concepts and advanced techniques such as word embeddings, sequence models, attention mechanisms, and transformers. The program involved hands-on projects, where I ap-plied deep learning models to real-world NLP tasks, enhancing my skills in both theoretical understanding and practical implementation.

MSc Computer Linguistics & Neuroinformatics, University of Zurich *2024-Present*
Expected Graduation Date: 2026

Work Experience

Siemens, Software Engineer *2022-Present*

- Developed an equipment analysis application designed to evaluate the performance of industrial machines through statistical analysis. Integrated a Large Language Model (LLM) to enable users to interactively query and analyze the data, allowing for more intuitive insights and flexibility in reporting. This project utilized a range of technologies, including Python, PyTorch for machine learning capabilities, Azure PostgreSQL for data storage and management, and JavaScript for front-end functionality.
- Created TsOpen, a comprehensive full-stack application that leverages LLMs to automatically generate test cases for industrial machines. This application supports end-to-end test management by using a Node.js and Python backend, with PyTorch for the LLM, and a front-end built with TypeScript, CSS, and HTML to ensure a responsive user experience.

GeoCtrl, Software Engineer working student *2020-2022*

- Developed a real-time sensor-based solution for retail stores to monitor customer traffic patterns, utilizing Linux and Raspberry Pi for cost-effective deployment. Managed data collection with Python and stored insights in PostgreSQL. This system empowered stores to optimize staffing, layout, and product placements based on customer flow.

University of Zurich, Teaching Assistant, Mathematical Foundations of Machine Learning *2023*

- Supported students in understanding mathematical principles behind machine learning, providing guidance on topics such as linear algebra, probability theory, transformers and optimization techniques as applied to ML. Assisted in grading and offered additional tutoring sessions for in-depth topic exploration.

Activities and Interests

- Active member of the Computer Linguistics University Group, contributing to discussions and projects in linguistics and technology.
- Member of the Siemens Students Association, engaging in professional development and networking with peers in the tech industry.