Mikko Lempinen

mikko_lempinen@outlook.com | www.mikkolempinen.dev | github.com/Zippo00

Skills

Languages: Python, C++, C, JavaScript, MATLAB, SQL

Technical: DevOps, MLOps, CI/CD, Git, PyTorch, IT Centre for Science (CSC) Cloud services, Agentic AI Systems, GenAI

Experience

Research Assistant, Biomimetics and Intelligent Systems Group – Oulu, Finland   Sept 2024 – Aug 2025
- Conducted extensive research into vulnerabilities affecting large language model (LLM) applications and different security frameworks for safe AI deployment
- Designed and implemented secure deployment strategies for LLM applications as Master's thesis: urn.fi/URN:NBN:fi:oulu-202506124420
- Represented Oulu University Secure Programming Group in AI conferences, presenting posters and interacting with industry leaders
- Took part in developing higher education for the age of AI, culminating in the Group being awarded by The University of Oulu and the Student Union of the University of Oulu for our efforts in developing education

Summer Trainee, Biomimetics and Intelligent Systems Group – Oulu, Finland   May 2024 – Aug 2024
- Designed and developed a containerized virtual environment for vulnerability testing language models, incorporating various LLMs in inference, as well as different tools for testing them for vulnerabilities
- Managed multiple AI vulnerability hackathons with up to 100+ participants

Projects

Digital Asset Market Data Analytics Platform
- Designed and developed a web-based market data analytics platform with Python and JavaScript, allowing interactive analysis of various market data metrics
- Automated SQL database functionalities in conjunction with the REST APIs of all major cryptocurrency exchanges

Chatbot for Assessing System Security with OpenAI GPT-3.5   urn.fi/URN:NBN:fi:oulu-202306292789
- Designed and developed the Python backend for an AI-powered chatbot capable of suggesting and executing system security related tasks, with an automated threat detection system
- Deployed the application in a cloud production environment and orchestrated initial user testing with participants from across the globe
- Led the development team, successfully exceeding the product expectations by deadline despite multiple challenges threatening to derail progress, through effective communication, strategic problem-solving, and motivating team members to maintain focus on key objectives
- Awarded Distinguished Project Award for the Academic year 2022-2023 by University of Oulu for the project's novelty and impactful contributions

Menu and Food Ordering Web Application for Restaurants   github.com/Zippo00/GET-Food
- Designed a web application - incorporating an API endpoint, a database, and a client - restaurants and restaurant chains can use to present their menus online, with an integrated food ordering system
- Developed unit tests for the API, deployed the application in a cloud production environment, and managed the development team while guiding and assisting each of the 4 team members with their respective development tasks

Education

University of Oulu – M.Sc in Computer Science and Engineering   June 2025
University of Oulu – B.Sc in Computer Science and Engineering   June 2023