# Vencel David Koczka

koczka990@gmail.com +36 30 903 2343 Budapest, Hungary website

### **WORK EXPERIENCE**

Hypertype AB

Jan. 2025 - Jun. 2025

Stockholm, Sweden

ML Engineer and Thesis Student

- Implemented an automatic evaluation framework for Retrieval-Augmented Generation (RAG) pipelines and researched a feedback loop theory to enable continuous system improvement and performance optimization.
- Designed and deployed a scalable web scraping module as a Dockerized microservice, capable of extracting and transforming web data into Markdown datasets for LLM fine tuning and knowledge integration.
- Contributed to the architecture and development of HyperAgent, the company's autonomous AI customer support agent, focusing on database design, backend implementation, and system scalability.

Ericsson Jun. 2024 – Aug. 2024

Student Developer

Budapest, Hungary

- Contributed to Quality of Service (QoS) time series prediction research for 5G networks, assisting in model evaluation and data analysis to enhance network reliability.
- Extended and optimized Go-based backend APIs, improving performance and maintainability for internal tools.
- Deployed microservices using Docker and Helm charts in a Kubernetes environment, supporting scalable research infrastructure

EPIC Innolabs Jul. 2022 – Aug. 2023

Junior Software Engineer

Budapest, Hungary

- Designed and developed full-stack applications using C#, .NET, Angular, and PostgreSQL for automotive manufacturing clients, streamlining SAP-related workflows and improving production data visibility.
- Delivered a consulting project for Intel Corp (USA), replacing a manual Excel-based financial forecasting tool with an automated Python (Pandas, NumPy) solution, eliminating manual input and improving forecast accuracy and data integrity.

KIBU Nonprofit Ltd.

Sep. 2019 – Jun. 2022

Software Engineer Intern

Budapest, Hungary

- Joined KIBU, the innovation lab behind Prezi, after success in a national startup competition.
- Supported AI-driven R&D projects, including image annotation for drone-based inventory systems.

#### **EDUCATION**

Uppsala University May. 2025

Master's Degree in Data Science – Machine Learning and Statistics

Uppsala, Sweden

- Thesis: Improving Data Integrity and Response Accuracy in AI-Powered Customer Communication Systems
- Data Analytics of 3D spatial sensor data for Husqvarna lawn mower at Stream Analyze
- LLM powered teaching assistant to improve workflow of tutors, and provide them with worksheets

## **Budapest University of Technology and Economics**

Jan. 2023

Bachelor's Degree in Computer Engineering

Budapest, Hungary

- Second Prize Winner, TDK Conference for Scientific Students' Associations.
  - o YOLO based error detection system for pharmaceutical production lines

#### **SKILLS & INTERESTS**

- **Programming & Tools:** Python, C#, C++, C, Java, SQL, .NET, Angular, Git, CI/CD, Docker, REST APIs
- ML & Data: RAG, LLMs, PyTorch, Scikit-learn, Pandas, Numpy, LangChain, Data Pipelines
- Soft Skills: Leadership, Public Speaking, Communication, Team Collaboration, Cross-functional Coordination
- Interests: Martial arts, Magic tricks, Playing Drums, Music Production, Meeting New People