Šimon Růžička

 ruzicka02 | ruzicka02 | ruzicka02.github.io

Location: Prague, Czechia

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I specialize in integrating generative AI into applications – in a way that actually saves people time.

TECHNICAL SKILLS

- **Languages** : Python, C/C++, Julia, R
- **Libraries** : numpy, pandas, FastAPI, streamlit, PyTorch, matplotlib, PIL, scikit-learn, pytest
- **Technologies** : GNU/Linux, bash, Jupyter, LaTeX, PostgreSQL, Android Studio/Xcode
- **Dev tools** : Git, Gitlab CI/CD, Docker, PyPI, Conda, Google Colab, Make

EXPERIENCE

AI Engineer
CGI IT Czech Republic, s.r.o.

Jul 2024 – Now
Prague, Czechia

- Used **multimodal language models** in robotic process automation
- Built an application for assisted process documentation with **RAG workflows**
- Worked on an automated LLM solution for mobile app UI testing

Software Developer
Photonic Technologies s.r.o.

Jun 2023 – Oct 2023
Prague/Roztoky, Czechia

- Development of multiple projects in **Python** and **C**
- Tight collaboration with the design of custom hardware

Teaching assistant
Faculty of Information Technology CTU in Prague

Sep 2022 – Jan 2023
Prague, Czechia

- Practice lessons of the **Programming and Algorithmization 1** (C language) course

PROJECTS

NN@FPGA /ruzicka02/nn.fpga

Python, C, Verilog, AMD Vivado

- Low-level **neural network implementation** on FPGA using Verilog
- Team project created at TUM with further development potential

Neural model synthesis for FPGA with parameters in external memories /ruzicka02/bp2025

- Bachelor's thesis at FIT CTU
- Modification of the state-of-the-art hls4ml Python library to accommodate larger neural models
- Improved the internal memory efficiency by 55% compared to original hls4ml

EDUCATION

Faculty of Information Technology CTU fit.cvut.cz
studying Master (Ing.)

Jul 2021 – Jun 2027 (expected)
Prague, Czechia

- General study program **Informatics**, specialization **Artificial Intelligence**
- Graduated with honors in Bachelor's degree (Bc.) in Jun 2025

Aalto University aalto.fi
Erasmus study exchange – Master

Sep 2025 – Dec 2025
Helsinki, Finland

Technical University Munich tum.de
Erasmus study exchange – Bachelor

Oct 2023 – Feb 2024
Munich, Germany