

# Ana Stanojevic

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GitHub: ana-stanojevic.com/github | Google Scholar: ana-stanojevic.com/scholar

#### **Profile**

AI Engineer with a PhD from EPFL and 5+ years of combined research & engineering experience in spiking neural networks, deep learning, and large-scale AI systems. Skilled at **bridging research depth with practical prototyping**, building systems that work in practice while solving complex, *high-impact problems*. Looking for applied AI/ML engineering roles where rigorous methods meet real-world applications, in an environment with hybrid flexibility and meaningful projects.

#### **Core Skills**

- Programming & ML: Python, C++, PyTorch, TensorFlow, scikit-learn, Transformers, CUDA
- Systems & Tools: Docker, Git, Linux, SQL, LaTeX, LangChain, FAISS
- Big Data: Apache Spark, Hadoop HDFS, Kafka
- Soft skills: Communication, collaboration, project leadership, cross-functional teamwork
- Languages: English (C2), German (B1), French (A1)

#### **Professional Experience**

## Huawei Research Center, Zürich - Researcher in Storage (AI/ML)

Jan 2024 - Feb 2025

- Optimised embeddings for large textual databases and RAG pipelines for robust and low-latency retrieval.
- Worked on distributed LLM inference systems, improving efficiency and scalability.
- Tech stack: PyTorch, Transformers, LangChain, CUDA.

#### IBM Research, Zürich - Predoctoral Researcher, Machine Learning

Oct 2019 - Dec 2023

- Developed supervised learning and inference methods for spiking neural networks with temporal coding.
- Built and validated computer vision prototypes using SNNs.
- Tech stack: Python, TensorFlow, Docker, scikit-learn.

#### Google, Zürich - Software Engineer Intern (Google Assistant)

Aug 2018 - Feb 2019

- Improved answer relevance for multi-query conversations in Google Assistant.
- Worked with BERT-based models in C++ and Python.

## IBM Research, Zürich - Research Intern (Machine Learning)

Feb 2019 - Aug 2019

• Built spiking neural network classifiers for file classification tasks.

#### **Education**

#### EPFL, Lausanne - PhD in Computer & Communication Sciences

Feb 2020 - Dec 2023

- Research: supervised learning and inference of spiking neural networks with temporal coding.
- Supervisor: Prof. Wulfram Gerstner.

#### EPFL, Lausanne - MSc in Communication Systems (Data Analytics)

Sept 2016 - Sept 2019

### **University of Belgrade - School of Electrical Engineering**

## BSc in Electrical & Computer Engineering, Computer and Software Engineering track

Sept 2012 - Aug 2016

## **Selected Projects (GitHub Showcase)**

- C++ Deep Learning Prototype lightweight multi-layer perceptron (MLP) implementation in modern C++ demonstrating low-level ML fundamentals and efficient system design. Secup-ffn
- **Vision Classification in PyTorch** applied computer vision pipeline including training, evaluation, testing, and deployment; efficient on resource-constrained hardware. 

  \*\*Spytorch-vision-pipeline\*\*

## **Research Impact**

- Citations: 100+ | h-index: 5 | i10-index: 2
- Publications in top journals and conferences, including *Nature Communications*, *Neural Networks*.
- Patents: Neural Network Having Accuracy-Latency Balance (2025); Approximation-Free Neural Network Mapping (2025).

# **Awards & Diplomas**

- IBM Research Zürich Pat Goldberg Honorable Mention Award (2025)
- ETH Zürich Summer School on Open Source IC Design (2024)
- EPFL Excellence Fellowship (2016–2018)
- Government of Serbia Dositeja Award (2015/2016)

## **Volunteering**

Powercoders, Zürich - IT Trainer Sept 2019 - Jun 2021

• Taught programming and supported refugee integration into the IT workforce.