Angéline Nathalie Pouget

Leutschenbachstrasse 46 8050 Zürich Switzerland

angeline.pouget@pouget.ch +41 77 496 82 08

Education

ETH Zürich Sep 2022 – current

Master of Science in Data Science

Zürich, Switzerland

- Strong focus on reliable & trustworthy AI research (current weighted average: 5.82 / 6.00). • Full scholarship through the Excellence Scholarship & Opportunity Programme of ETH Zürich.
- ETH Zürich Sep 2018 – Aug 2021

Bachelor of Science in Electrical Engineering and Information Technology

Zürich, Switzerland

- Graduated with distinction (weighted average: 5.79 / 6.00).
- · Awarded merit-based scholarship by the Werner Siemens-Foundation and the Swiss Study Foundation.

Research & Teaching Experience

Research Intern and Visiting Graduate Student

May 2024 - current Toronto, Ontario, Canada

Vector Institute and University of Toronto

• Supervisor: Prof. Nicolas Papernot

• Research on building fair, trustworthy and privacy-respecting AI models.

Research Assistant Feb 2023 - current

Secure, Reliable, and Intelligent Systems Lab, ETH Zürich

Zürich, Switzerland

• Supervisor: Prof. Martin Vechev

- Research on provable fairness in machine learning models through data pre-processing (FRL).
- Analyzing the tradeoff between fairness and the utility of representations in downstream tasks (especially for transfer learning).

Student Researcher Sep 2023 - Mar 2024

Google DeepMind

Zürich, Switzerland

- Collaboration with (among others): Ibrahim Alabdulmohsin, Lucas Bever, Xiaohua Zhai
- Measured the impact of culturally diverse, global and multilingual training data on contrastive vision-language models.

Teaching Assistant Sep 2019 - Jun 2023

ETH Zürich

Zürich, Switzerland

- Prepared and taught weekly exercise sessions, held exam preparation courses, served as liaison between professors and students, collaborated with professors and senior researchers across 4 institutes.
- Institute for Machine Learning, "Introduction to Machine Learning" (Spring 2023), 1000+ students Chair for Mathematical Information Science, "Signals and Systems Theory" (Fall 2022, Fall 2020) Photonics Laboratory, "Electromagnetic Waves and Fields" (Spring 2021)

- Integrated Systems Laboratory, "Digital Circuits" (Fall 2019)

Bachelor Project Student

Feb 2021 - Jul 2021

IBM Research

Rüschlikon, Switzerland

- Supervisors: Abbas Rahimi, Michael Hersche
- Developed a weightless RNN for sparse factorization problems outperforming state of the art models especially for problem sizes larger than 10⁹ (accuracy consistently at 1.0).
- Reduced the parameter count of the MobileNet-V2 classifier by 99.79%.

Student Researcher Sep 2020 - Jan 2021

Computer Vision Lab, ETH Zürich

Zürich, Switzerland

- Supervisor: Prof. Radu Timofte
- Collected and labelled a camera scene detection dataset of 11k images in 30 categories.
- Developed an NPU-friendly CNN model with top-1 and top-3 accuracy of more than 94% and 99%.

Forward Deployed Engineer Intern

Jun 2023 – Sep 2023

Palantir

London, United Kingdom

- Developed and managed four different use cases in close collaboration with internal and client stakeholders during scoping, development and go-live.
- Worked closely with product development teams to ensure that client feedback is leveraged to continually improve Palantir's product offerings.
- · Onboarded two new client team members.

Fellow Intern Feb 2022 – Apr 2022

McKinsey & Company

Zürich, Switzerland

• Solved challenging business problems across two different industries and companies in close cooperation with clients and colleagues.

Structured Products Analyst Intern

Jul 2021 – Jan 2022

Goldman Sachs

London, United Kingdom

Developed and priced novel cross asset structured products and derivatives solutions.

Volunteering Experience

Managing Partner

Jun 2022 – Jun 2023

Founderful Campus

Zürich, Switzerland

- Led a team of seven people in a student-led VC fund that supports founders of technical startups from ETH, EPFL and HSG with initial capital and mentorship.
- Invested CHF 200'000 in eight different startups over the course of two semesters.

Research Publications & Preprints

Michael Hersche, Aleksandar Terzic, Geethan Karunaratne, Jovin Langenegger, **Angéline Pouget**, Giovanni Cherubini, Luca Benini, Abu Sebastian, Abbas Rahimi. "Factorizers for Distributed Sparse Block Codes". In *Neurosymbolic Artificial Intelligence*. May 2024.

Angéline Pouget, Sidharth Ramesh, Maximilian Giang, Ramithan Chandrapalan, Toni Tanner, Moritz Prussing, Radu Timofte, Andrey Ignatov. "Fast and accurate camera scene detection on smartphones". In *Mobile AI 2021 Workshop at Conference on Computer Vision and Pattern Recognition (CVPR)*. May 2021.

Andrey Ignatov, Kim Byeoung-su, Radu Timofte, **Angéline Pouget**, et al. "Fast camera image denoising on mobile GPUs with deep learning, mobile AI 2021 challenge: Report"

In Mobile AI 2021 Workshop at Conference on Computer Vision and Pattern Recognition (CVPR). May 2021.

Awards & Honors

Excellence Scholarship & Opportunity Award

ETH Zürich 2022

Werner Siemens Fellowship

Werner Siemens-Foundation and Swiss Study Foundation 2020

Best of Year and Best Matura Paper

Kantonsschule Zürcher Unterland 2018

Skills

Coding languages: Python (PyTorch, TensorFlow, Keras), SQL, Java, C++

Languages: German (native), English (fluent), French (intermediate), Italian (beginner)

Non-technical skills: communication, project management, analytical thinking, team leadership