Angéline Nathalie Pouget

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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)
- Full scholarship by the Werner Siemens-Foundation and the Swiss Study Foundation

Research & Teaching Experience

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, tightness of fairness certificates and the utility of representations in downstream tasks

Student Researcher   Sep 2023 – Mar 2024
Google DeepMind   *Zürich, Switzerland*
- Collaboration with (among others): Ibrahim Alabdulmohsin, Lucas Beyer, Xiaohua Zhai
- Measuring the impact of culturally diverse, global and multilingual training data on multimodal deep learning system performance with a focus on model biases and fairness.

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 10^9 (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%.

Additional Work Experience

Forward Deployed Engineer Intern
Palantir

Jun 2023 – Sep 2023
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
McKinsey & Company

Feb 2022 – Apr 2022
Zürich, Switzerland

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

Structured Products Analyst Intern
Goldman Sachs

Jul 2021 – Jan 2022
London, United Kingdom

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

Volunteering Experience

Managing Partner
Founderful Campus

Jun 2022 – Jun 2023
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". Preprint. March 2023.

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, SQL, Java, C++
Languages: German (native), English (fluent), French (intermediate), Italian (beginner)
Non-technical skills: communication, project management, analytical thinking, team leadership