Sepideh Mamooler

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sMamooler

Education

Swiss Federal Institute of Technology Lausanne (EPFL)

PhD Computer Science — Sep 2023 - Sep 2027 (Expected)
Natural Language Processing and Computer Vision.
Supervisors: Profs. Antoine Bosselut and Alexander Mathis.

MSc Computer Science and Research Scholar — Sep 2020 - Aug 2023
Focus on Machine Learning, Computer Vision, and Natural Language Processing.
Current GPA: 5.6/6

BSc Computer Science — Sep 2017 - Aug 2020
Focus on Machine Learning, Visual Computing and Signal Processing.
Exchange year at **Swiss Federal Institute of Technology Zürich (ETHZ).**
GPA: 5.03/6

Awards and Scholarships

Boehringer Ingelheim Fonds PhD Fellowship — Oct 2023 - 2026

Best Poster Presentation Award, Women in Data Science Conference — Apr 2023

EPFL MSc Research Scholarhip — Jun 2020 - 2022

Vahabzadeh Student Scholarship — Sep 2016 - 2022

Publications

Sepideh Mamooler, Syrielle Montariol, Alexander Mathis, Antoine Bosselut. *PICLe: Pseudo-annotations for In-Context Learning in Low-Resource Named Entity Detection*, under submission for NAACL 2025

Sepideh Mamooler, Remi Lebret, Stephane Remo Massonnet, and Karl Aberer. *An efficient active learning pipeline for legal text classification.* In Natural Legal Language Processing Workshop at EMNLP, 2022

Research and Industry Experience

Research Intern, Google DeepMind — Jun 2024 - Oct 2024

Studied social capabilities of LLMs in multi-agent environments.
Hosts: Florian Hartmann, Iulia Comșa

Computer Vision Intern, Second Spectrum — Jul 2022 - Jan 2023

Developed a hybrid convolution-attention model for keypoint detection of football fields, and an evaluation pipeline for keypoint-based camera calibration.

Student Researcher, Distributed Information Systems Lab-EPFL — Sep 2020 - Jun 2022

Developed an efficient active learning pipeline for legal text classification.
Published at the NLLP workshop at the EMNLP Conference 2022.
Open sourced code at github.com/sMamooler/Efficient_AL_Pipeline.

Student Researcher, Image and Visual Representation Lab-EPFL   Sep 2021 - Jan 2022

Developed a method for visual interpretation of CLIP, a vision-language deep
learning model.
Open sourced code at github.com/sMamooler/CLIP_Explainability.

Computer Vision and Geometry Group (CVG)-ETHZ   Feb 2020 - Aug 2020

BSc Thesis: Designed and implemented a radial distortion invariant features
detector and descriptor.
Open sourced code at github.com/sMamooler/RD-SuperPoint.

Teaching Experience

Undergraduate and Graduate Courses - EPFL

Applied Data Analysis   Fall 2023, 2024

Modern Natural Language Processing   Spring 2023

Analysis and Linear Algebra   Fall 2019

Technical Expertise

Coding Languages: Python, C/C++, Java

ML Frameworks and Libraries: PyTorch, TensorFlow, Scikit-learn, Numpy, Pandas, Matplotlib

Computer Vision and NLP Libraries: Pillow/PIL, OpenCV, Torchvision, timm, NLTK, HuggingFace

Other Technical Skills: Git, Linux, Cluster Computing, Kubernetes

Project Management and Soft Skills: Project design and organization, Problem solving, Teamwork, Excellent presentation skills

Services

Event manager and workshop chair - Women+ in IC, EPFL   Sep 2024 - Now

Reviewer for the Student Research Workshop - **EACL** 2024   Sep 2022 - Dec 2022

Mentored EPFL's incoming master's students in computer science.   Sep 2022 - Dec 2022

Languages

English: Fluent spoken and written

French: Fluent spoken

Persian: Native language

Hobbies

Yoga, Tennis, Swimming, Gardening, Reading