Angelika Romanou

Rue Saint-Martin 25, Lausanne 1003, Switzerland 18/11/1992 +41 78 251 67 38 angelika.romanou@epfl.ch

Website ♦ Github ♦ Google Scholar

RESEARCH INTERESTS

Research areas: Post-Training/Alignment, Evaluation (Reasoning/Multilingual), Robustness & Prompt Sensitivity, Long-Context Reasoning

My research focuses on building reliable AI systems by closing the loop between evaluation and post-training. I develop evaluation pipelines that target complex reasoning, long-context understanding, and prompt sensitivity, exposing where models fail. These insights drive the design of post-training interventions that directly address identified weaknesses, improve robustness and transfer across languages, with demonstrated gains at scale.

Professional & Research Experience

08/2025 - Present Research Scientist Intern, Meta FAIR, New York City / USA

• Research on evaluating and improving robustness and prompt sensitivity in LLMs.

09/2020 - Present PhD Candidate, EPFL - NLP lab, LSIR lab, Lausanne / Switzerland

- Research on complex reasoning & cross-lingual transfer in Large Language Models (LLMs).
- Teaching Assistant for Modern NLP & DIS & DB-Systems EPFL master courses.
- Supervisor for students' semester projects and master thesis.

06/2019 - 08/2020 Machine Learning Research Scientist, EPFL - <u>lsir.epfl.ch</u>, Lausanne / Switzerland

- Research on sequence modeling and natural language processing.
- Software development for machine learning projects.

03/2018 – 05/2019 Machine Learning Software Engineer, Beat - thebeat.co, Athens / Greece

- Design, implement, and deploy machine learning features for Beat App or internal tools.
- Develop reliable and scalable services using micro-services architecture.

02/2017 - 02/2018 Big Data Software Engineer, Beat - thebeat.co, Athens / Greece

- Build data streaming pipelines in order to serve machine learning applications/services.
- Develop components that analyze, process, and react to operational feeds in near real-time, optimizing driver allocation, optimizing service pricing, and preventing fraudulent activities.
- Work with other engineering teams to translate complex models and algorithms into production-grade software systems.

03/2014 - 01/2017 Data Scientist, Intelen Inc - intelen.com, Athens / Greece

- Demand forecasting and energy grid optimization.
- Perform data-driven business consulting on clients.
- Research and development on data-oriented functionalities and services.

09/2020 - Present Ecole Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland

- PhD degree: Computer Science
- Thesis direction: "Evaluation of Generative AI Agents in Multilingual and Multimodal Contexts"

09/2016 - 07/2018 Athens University of Economics and Business (AUEB), Athens, Greece

- MSc degree: Data Science (2-year degree, 78 ECTS)
- Thesis: "Named Entity Recognizer for the Greek Language using Deep Learning Architectures."

09/2010 - 07/2015 Athens University of Economics and Business (AUEB), Athens, Greece

- **BSc degree**: Department of Management Science and Technology (4-year degree, 240 ECTS)
 - o Grade: 8.04/10 "Very Good"
 - o Major: Information Systems
- Thesis: "An Overview of Information Systems Architectures and their Impact on Strategic Management"

NOTABLE PUBLICATIONS

- Apertus: Democratizing Open and Compliant LLMs for Global Language Environments (Sept.2025) Apertus Team, *Arxiv* 2025 [Paper]
- Measuring what Matters: Construct Validity in Large Language Model Benchmarks (July 2025) Bean A, Kearns R, Romanou A, Mahdi A et al., NeurIPS 2025
- PERK: Long-Context Reasoning as Parameter-Efficient Test-Time Learning (July 2025) Chen Z, Romanou A, Weiss G, Bosselut A, Arxiv 2025 (Under Submission) [Paper]
- Global-MMLU: Understanding and addressing cultural and linguistic biases in multilingual evaluation (Nov. 2024) Singh S, Romanou A, Fourrier C, Choshen L, Ippolito D, Hooker S, et al., ACL 2025 [Paper]
- INCLUDE: Evaluating Multilingual Language Understanding with Regional Knowledge (Sept. 2024) Romanou A, Foroutan N, Hooker S, Bosselut A, et al. ICLR 2025 (Spotlight) [Paper]
- Meditron-70b: Scaling medical pretraining for large language models (Nov. 2023) Chen Z, Cano AH, Romanou A, Bosselut A, et al. arXiv preprint [Paper]
- CRAB: Assessing the Strength of Causal Relationships Between Real-world Events (Jun. 2023) Romanou A, Montariol S, Paul D, Laugier L, Aberer K, Bosselut A, EMNLP 2023 [Paper]
- Interpreting Language Models Through Knowledge Graph Extraction (Dec. 2021) Swamy V, Romanou A, Jaggi M, eXplainable AI Workshop @NeurIPS2021 [Paper]
- more on my Google Scholar

GRANTS & AWARDS

• Meta Large Language Models Evaluations Research Grant (2024)

RECENT INVITED TALKS

• Invited Talk at AMLD 2024, Lausanne / Switzerland (in-person)

- Causality Workshop at AAAI 2024, Vancouver / Canada (in-person)
- Poster presentation at EMNLP 2023, Singapore / Singapore (in-person)
- iNET Oxford Seminars (Nov 2023), Oxford / United Kingdom (in-person)

PROGRAMMING SKILLS

- Languages: Python, Scala, SQL
- ML Frameworks: Pytorch, Transformers, Tensorflow, scikit-learn
- Big Data Frameworks: Apache Spark, Apache Flink, Apache Hive

LANGUAGES

• English (fluent), Greek (native), French (basic)