# Shuangqi Li

Q Lausanne, Switzerland ☐ shuangqi.li@epfl.ch ☐ lishuangqi.com

# EDUCATION \_\_\_\_\_

EPFL (Swiss Federal Institute of Technology of Lausanne)

PhD in Machine Learning

Lausanne, Switzerland Sept 2022 – present

EPFL (Swiss Federal Institute of Technology of Lausanne)

Master in Data Science

Lausanne, Switzerland Sept 2020 - July 2022

University of California, San Diego

Master in Computer Science (Quit due to visa issues and COVID-19.)

Remote Sept 2019 - June 2020

University of Electronic Science and Technology of China

Bachelor in Microelectronic Science and Engineering

Chengdu, China Sept 2015 – June 2019

## Work Experience \_\_\_\_\_

Research Intern

Zurich, Switzerland July 2021 - Sept 2021

Oracle Labs • Developed a machine learning model that detects anomalous Linux sessions in the cloud servers.

Algorithm Engineering Intern

Beijing, China

Didi Chuxing (China's largest taxi-hailing platform)

Oct 2018 – Feb 2019

o Developed an algorithm for learning road segment weights from historical ride data, improving route planning quality for ride-hailing services.

### Projects \_\_\_\_\_

# Efficient Training Data Attribution for Large Language Models

Aug 2025 – present

Ongoing research

- Training Data Attribution faces severe computational challenges for modern-sized LLMs.
- We improved conventional influence functions by exploiting the low-rank property of the gradient to make them more efficient and scalable.

#### Improving Waste Detection and Sorting on Conveyor Belt

Supervising two semester projects:

Sept 2025 – present WasteFlow, Switzerland

- YOLO uncertainty estimation and confidence recalibration.
- Real-time object brand recognition on conveyor belts.

#### Learning to Weight Parameters for Training Data Attribution

Feb 2025 - Sept 2025

Submitted to ICLR 2026. arXiv

- Identified the heterogeneity of attribution strengths across parameters/layers.
- Proposed a method to re-weight layers, boosting attribution accuracy and enabling fine-grained attribution.

#### Enhancing Text-to-Image Generation with Reliable Random Seeds

Jan 2024 - Oct 2024

ICLR 2025 Spotlight. arXiv

- Identified the significant role of initial noise in text-to-image inconsistencies.
- Proposed a method to mine reliable random seeds to improve text-to-image generation.

#### Controlling the Fidelity and Diversity of Deep Generative Models

Feb 2023 - Mar 2024

TMLR 2024 (poster presentation at ICLR 2025). arXiv 🗹

Proposed an approach to bias deep generative models, such as GANs and diffusion models, towards generating data with either enhanced fidelity or increased diversity.

Interlock-Free Multi-Aspect Rationalization for Text Classification

Sept 2021 - Feb 2022

Semester project. arXiv 🗹

• Proposed a multi-stage training method to alleviate the interlocking issue in selective rationalization.

# Teaching Experience

o CS-233: Introduction to Machine Learning – Head Teaching Assistant	Spring 2025
o CS-401: Applied Data Analysis – Teaching Assistant	Fall 2024
o CS-233: Introduction to Machine Learning – Teaching Assistant	Spring 2024
o COM-407: TCP/IP Networking – Teaching Assistant	Fall 2023
○ COM-112: Object-Oriented Programming (in C++) – Teaching Assistant	Spring 2023
o CS-456: Deep Reinforcement Learning – Student Teaching Assistant	Spring 2022

# Honors & Awards

o National Scholarship	Sept 2018
o China Collegiate Programming Contest – Gold Medal	May 2018
• China Collegiate Computing Contest – First Prize	Mar 2018
o First-class People's Scholarship	Dec 2017
o ACM ICPC (Asia Regional) – Bronze Medal	Oct 2017
• China Collegiate Computing Contest – First Prize	Apr 2017
o First-class People's Scholarship	Dec 2016

# Skills \_\_\_\_\_

**Programming:** Proficient with Python, C++

Frameworks & Tools: PyTorch, Docker, Git, Linux, Cursor, Claude Code

Languages: Chinese (native), English (fluent), French (basic)

# Publications \_\_\_\_\_

Learning to Weight Parameters for Data Attribution	arXiv:2506.05647 <b>☑</b>
Shuangqi Li, Hieu Le, Jingyi Xu, and Mathieu Salzmann	Submitted to ICLR 2026

Enhancing Compositional Text-to-Image Generation with Reliable Ran-	ICLR 2025 🗹
dom Seeds	Spotlight (top 4%)

Shuangqi Li, Hieu Le, Jingyi Xu, and Mathieu Salzmann

Controlling the Fidelity and Diversity of Deep Generative Models via	TMLR 2024 🗹
Pseudo Density	Presented at ICLR 2025

 $\underline{Shuangqi\ Li},\ Chen\ Liu,\ Tong\ Zhang,\ Hieu\ Le,\ Sabine\ S\"{u}sstrunk,\ and\ Mathieu\ Salzmann$ 

Interlock-Free Multi-Aspect Rationalization for Text Classification arXiv:2205.06756 🗹 Shuangqi Li, Diego Antognini, and Boi Faltings