# Sina Sajadmanesh

♥ Zurich, Switzerland ☑ sina.sajadmanesh@gmail.com 🔗 sajadmanesh.com in sajadmanesh 🗘 sisaman

#### Welcome to RenderCV!

RenderCV Z is a LaTeX-based CV/resume version-control and maintenance app. It allows you to create a high-quality CV or resume as a PDF file from a YAML file, with Markdown syntax support and complete control over the LaTeX code.

The boilerplate content was inspired by Gayle McDowell .

#### **Quick Guide**

- Each section title is arbitrary and each section contains a list of entries.
- There are 7 unique entry types: *BulletEntry*, *TextEntry*, *EducationEntry*, *ExperienceEntry*, *NormalEntry*, *PublicationEntry*, and *OneLineEntry*.
- Select a section title, pick an entry type, and start writing your section!
- Here **\(\mathbb{L}\)**, you can find a comprehensive user guide for RenderCV.

#### Education

Swiss Federal Institute of Technology (EPFL), PhD in Electrical Engineering	May 2019 – Aug 2023
Sharif University of Technology, MSc in Information Technology Engineering	Sept 2014 – Sept 2016
University of Isfahan, BSc in Computer Software Engineering	Sept 2009 – Feb 2014

# **Experience**

Sony AI, AI Engineer - Zurich, Switzerland

Oct 2023 - present

- Developed an end-to-end open-world classification pipeline using OpenMMLab frameworks and HuggingFace to train and test privacy-preserving **vision foundation models** for Sony's next-generation AI products.
- Improved the speed of training and inference of models by optimizing the code and leveraging distributed computing.

Idiap Research Institute, Research Assistant – Martigny, Switzerland

May 2019 - Aug 2023

- 3 published papers in top-tier conferences (CCS, USENIX Security, and NDSS) with 185+ citations
- 7 invited talks at top universities and research institutions, including Imperial College, UIC, and Twitter
- 6 open-source projects with 110+ stars on GitHub
- 1 short course taught on "Trustworthy Machine Learning" at Artificial Intelligence Doctoral Academy 🗹

The Alan Turing Institute, Visiting Collaborator – London, UK

Mar 2023 - Mar 2023

• Co-organized a workshop on "Privacy and Fairness in AI for Health" 

✓ with 60+ attendees

Brave Software, Research Intern - Remote

Mar 2022 – May 2022

• Developed a novel privacy-preserving federated learning framework for neural bandit models under client heterogeneity using PyTorch, Flower, Dask, and Tensorflow-Lite

**Sharif University of Technology**, Research Assistant – Tehran, Iran

Nov 2014 – May 2019

- 4 published papers in top-tier venues (WWW, TKDD, IoTJ, ASONAM) with 430+ citations
- 5+ press releases in top-tier media outlets, including MIT Technology Review 2, France 24 2, and The Independent 2
- 2 open-source projects with 20+ stars on GitHub
- 1 semester course taught on "Fundamentals of Programming with Python" at Sharif University of Technology

### **Publications**

Sina Sajadmanesh, Daniel Gatica-Perez

Mar 2024

ProGAP: Progressive Graph Neural Networks with Differential Privacy Guarantees &

ACM International Conference on Web Search and Data Mining (WSDM)

Sina Sajadmanesh Aug 2023

Privacy-Preserving Machine Learning on Graphs ☑

Swiss Federal Institute of Technology (EPFL) - Doctoral Thesis

Sina Sajadmanesh, Ali Shahin Shamsabadi, Aurélien Bellet, et al.

Aug 2023

GAP: Differentially Private Graph Neural Networks with Aggregation Perturbation ☑

USENIX Security Symposium (USENIX Security)

Sina Sajadmanesh, Daniel Gatica-Perez

Nov 2021

Locally Private Graph Neural Networks 🗹

ACM Conference on Computer and Communications Security (CCS)

Sina Sajadmanesh, Daniel Gatica-Perez

June 2020

When Differential Privacy Meets Graph Neural Networks 2

Technical Report, ArXiv e-prints

Seyed Ali Osia, Ali Shahin Shamsabadi, *Sina Sajadmanesh*, et al.

May 2020

A Hybrid Deep Learning Architecture for Privacy-Preserving Mobile Analytics 🗹

IEEE Internet of Things Journal (IoTJ)

Sina Sajadmanesh, Sogol Bazargani, Jiawei Zhang, Hamid R. Rabiee

Aug 2019

Continuous-Time Relationship Prediction in Dynamic Heterogeneous Information Networks

ACM Transactions on Knowledge Discovery from Data (TKDD)

Sina Sajadmanesh, Jiawei Zhang, Hamid R. Rabiee

June 2017

NPGLM: A Non-Parametric Method for Temporal Link Prediction ☑

Technical Report, ArXiv e-prints

Sina Sajadmanesh, Sina Jafarzadeh, Seyed Ali Ossia, et al.

Apr 2017

Kissing Cuisines: Exploring Worldwide Culinary Habits on the Web 🗹

International World Wide Web Conference Companion (WWW)

Sina Sajadmanesh, Hamid R. Rabiee, Ali Khodadadi

Aug 2016

Predicting Anchor Links between Heterogeneous Social Networks ☑

International Conference on Advances in Social Networks Analysis and Mining (ASONAM)

#### **Projects**

#### **Multi-User Drawing Tool**

github.com/name/repo

- Developed an electronic classroom where multiple users can simultaneously view and draw on a "chalkboard" with each person's edits synchronized
- Tools Used: C++, MFC

#### **Synchronized Desktop Calendar**

github.com/name/repo

- Developed a desktop calendar with globally shared and synchronized calendars, allowing users to schedule meetings with other users
- Tools Used: C#, .NET, SQL, XML

# **Custom Operating System**

2002

- Built a UNIX-style OS with a scheduler, file system, text editor, and calculator
- Tools Used: C

# **Technologies**

Programming Languages: Python, C++, Java, SQL, Shell, MEX

Machine Learning and AI: PyTorch, TensorFlow, HuggingFace, OpenMMLab, PyTorch-Lightning

ML Ops and DevOps: Weights & Biases, Docker, GitHub, Dask, Neptune, Linux

Privacy-Enhancing Technologies: Flower, Opacus, Auto-DP