

Shijian Xu

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Education

- **Universität Basel** **Basel, Switzerland**
Ph.D. student 04/2024 – 2028 (expected)
Supervisor: Prof. Volker Roth
- **EPFL** **Lausanne, Switzerland**
M.Sc. in Data Science 09/2020 – 02/2023
Thesis: Weight Averaging for Out-of-Distribution Generalization and Few-Shot Domain Adaptation
Supervisor: Prof. Grigorios Chrysos & Prof. Volkan Cevher
- **Nanjing University** **Nanjing, China**
B.Sc. in Computer Science and Technology 09/2014 – 06/2018
Thesis: Predicting Smartphone App Usage with Recurrent Neural Networks
Supervisor: Prof. Wenzhong Li

Publications & Preprints

- NIMO: a Nonlinear Interpretable MOdel
Shijian Xu, Marcello Massimo Negri, Volker Roth
arXiv, 2025 (under review)
- Simple Control Baselines for Evaluating Transfer Learning
Andrei Atanov*, **Shijian Xu***, Onur Beker, Andrei Filatov, Amir Zamir
arXiv, 2022
- Predicting Smartphone App Usage with Recurrent Neural Networks
S. Xu, W. Li, X. Zhang, S. Gao, T. Zhan, Y. Zhao, W.-W. Zhu, T. Sun
International Conference on Wireless Algorithms, Systems, and Applications (WASA), 2018

Experience

- **University of Basel** **Basel, Switzerland**
Ph.D. research 08/2024 – Current
- A nonlinear yet interpretable model that preserves the transparency of linear models while capturing the complex representations enabled by neural networks.
- **Roche** **Basel, Switzerland**
PMDA Summer School 2024 05/08/2024 – 09/08/2024
- Predicting and understanding protein turnover in vitro and in vivo
- **LIONS Lab, EPFL** **Lausanne, Switzerland**
Master Thesis, supervisor: Dr. Grigorios Chrysos & Prof. Volkan Cevher 09/2022 – 02/2023
Out-of-Distribution Generalization
- Improved weight averaging based method for OOD generalization and few-shot domain adaptation
- **DisneyResearch|Studios** **Zürich, Switzerland**
Research Intern, mentor: Dr. Christopher Schroers & Dr. Abdelaziz Djelouah 02/2022 – 08/2022
- Image super-resolution
- **VILAB, EPFL** **Lausanne, Switzerland**
Semester Project, supervisor: Prof. Amir Zamir 03/2021 – 12/2021
Evaluation of Self-Supervised Learning

- Proposed an evaluation standard for measuring the effectiveness of pre-training methods
- **Tencent PCG** **Shanghai, China**
Research Intern 07/2021 – 09/2021
 - Transformer-based multi-label image classification
- **Tencent AI Lab** **Shenzhen, China**
Research Intern 02/2020 – 08/2020
 - Self-supervised multi-modal video classification
- **City University of Hong Kong** **Hong Kong**
Researcher 09/2018 – 12/2019
 - Deep learning for image specular highlight removal
 - Semi-supervised single image heavy rain removal
- **Nanjing University** **Nanjing, China**
Project Student, supervisor: Prof. Wenzhong Li 09/2015 – 06/2018
 - LSTM based model for app usage prediction and recommendation

Teaching

Teaching assistant on the following courses:

- Scientific Computing (University of Basel) 2024, 2025

Awards

- Second Prize of Excellent Bachelor Thesis Award, Nanjing University 2018
- Third Prize of Elite Program Scholarship, Nanjing University 2017
- Honorable Mention for MCM 2017, Nanjing University 2017
- Third Prize of People's Scholarship, Nanjing University 2016
- Second Prize of People's Scholarship, Nanjing University 2015

Languages

- **English:** Advanced, TOEFL iBT 103 (2023)
- **German:** Beginner, A2 (in progress)
- **French:** Beginner, A1/A2
- **Chinese:** Native