# Ke WANG

## Personal Data

EMAIL: k.wang@epfl.ch CITIZENSHIP: Chinese

#### ABOUT ME

I am currently a second-year PhD student at EPFL working under the supervision of Prof. Pascal Frossard. My research interests cover improving machine learning methods in terms of aspects such as reliability, robustness and data efficiency.

#### **EDUCATION**

Feb. 2023 - Present	PhD. in Machine Learning (EDIC fellowship program) École Polytechnique Fédérale de Lausanne, Switzerland
SEP. 2020 - FEB. 2023	M.S. in Electrical Engineering (with specialization in Data Science and Systems) <b>École Polytechnique Fédérale de Lausanne</b> , Switzerland GPA: 5.60 / 6.0
SEP. 2016 - Jun. 2020	B.S. in Electronic Information Science and Technology University of Electronic Science and Technology of China, China GPA: 3.99 / 4.0; Ranks 1st / 188; Top 0.53%

## Professional Experience

Feb. 2023 -	Doctoral Assistant at EPFL,	Lausanne, Switzerland
Present	Studied utilizing privileged information to explain away label noise	when training neural networks.
	Researching on the behavior of neural networks in model merging	and editing.
Mar. 2022 -	Machine Learning Intern at ORACLE LABS,	Zürich, Switzerland
Sep. 2022	AUTOMATED MACHINE LEARNING AND EXPLAINABILITY (AUTO	MLX) TEAM
	Conducted research on using machine learning techniques to develop	op financial flow forecasting sys-
	tem.	
July 2019 -	Research Intern at Chinese Academy of Sciences,	Beijing, China
Sep. 2019	HIGH ENERGY INSTITUTE	
	Researched on applying deep learning techniques to aid data proce	essing in particle physics experi-
	ments.	

## AWARDS AND HONORS

2023	EPFL EDIC PhD Fellowship, by EPFL
2020	Excellent Graduate Award, by UESTC
2020	Excellent Alumni Award, by School of Physical Electronics, UESTC
2019	Meritorious Winner in MCM (International Mathematical Contest in Modelling), 2019
2018-2	National Scholarship of China
	(highest-level scholarship across China for academic achievements.)
2018	Excellent Award for Student Projects
2016-2	Undergraduate Academic Excellence Scholarship

# **PUBLICATIONS**

- [1] K. Wang\*, N. Dimitriadis\*, G. Ortiz-Jimenez, F. Fleuret, and P. Frossard. Localizing Task Information for Improved Model Merging and Compression. In: International Conference on Machine Learning (ICML). 2024.
- [2] K. Wang, G. Ortiz-Jimenez, R. Jenatton, M. Collier, E. Kokiopoulou, and P. Frossard. Pi-DUAL: Using Privileged Information to Distinguish Clean from Noisy Labels. In: International Conference on Machine Learning (ICML). 2024.

- [3] K. Wang, H. Machiraju, O.-H. Choung, M. Herzog, and P. Frossard. CLAD: A Contrastive Learning based Approach for Background Debiasing. In: *British Machine Vision Conference (BMVC)*. 2022.
- [4] K. Wang, B. Wang, S. Li, and M. Cieliebak. Detection of Typical Sentence Errors in Speech Recognition Output. In: Swiss Text. 2022.
- [5] K. Wang, G. Hu, Y. Zhang, M. Dan, L. Li, and Y. Zhang. Polarization-Driven Edge-State Transport in Transition-Metal Dichalcogenides. In: *Physical Review Applied*. 2020.

#### Extracurricular Activities

2018	Attended Winter Program in National University of Singapore on software development
2017	Attended Summer Program visiting University of Oxford and University of Cambridge
2016-2020	Member of Students Union of UESTC
2016-2020	Various voluntary activities; Awarded 'Outstanding Volunteer in UESTC'
2016-2018	Class Monitor
2016-2018	Member of football team of School of Physical Electronics; Won Second Prize in Football Cup of UESTC

## TEACHING EXPERIENCE

#### • Machine Learning

• Information, Computation and Communication

• Object-Oriented Programming

# SOFTWARE SKILLS

LANGUAGES: Python, MATLAB, C, SQL

Frameworks: PyTorch, TensorFlow, Keras, Pandas,

Numpy, Scikit-learn

## LANGUAGES

Chinese: Native

ENGLISH: C1, TOEFL iBT: 112 / 120 FRENCH: Elementary (EPFL course)

#### Personal Interests

Football, Skiing, Traveling, History, Cinema