

Mian Zhong

☎ +41-76-5052946 | ✉ mzhong@ethz.ch | 🌐 <https://github.com/mianzg> | 🐦 @MianZhong

Education

ETH Zürich

Zürich, Switzerland

MSC DATA SCIENCE

Sep 2019 - May 2022

- Interdisciplinary Track: Law, Policy, and Innovation
- Thesis Advisor: Prof. Ryan Cotterell

University of California, Berkeley

Berkeley, California, U.S.A.

BACHELOR OF ARTS, MAJOR IN APPLIED MATHEMATICS

Aug 2015 - May 2019

- Concentration Area: Data Science

Research Interest

Machine Comprehension; ML Fairness and Trustworthiness; Computational social science

Publications

Mian Zhong, Shehzaad Dhuliawala, Niklas Stoehr. 2023. Extracting Victim Counts from Text. *Long paper of the 17th Conference of the European Chapter of the Association for Computational Linguistics: EACL 2023*

Mian Zhong*, Daphna Keidar*, Ce Zhang, Yash Raj Shrestha, Bibek Paudel. 2021. Towards Automatic Bias Detection in Knowledge Graphs. *Findings of the Association for Computational Linguistics: EMNLP 2021*

Mian Zhong*, Tiancheng Hu*, Ying Jiao*, Shehzaad Dhuliawala, Bipin Singh. 2021. Drug Re-positioning via Text Augmented Knowledge Graph Embeddings. *Proceedings of NeurIPS 2021 Workshop on AI for Science: Mind the Gaps*

* *equally contributed*

Research Experience

ETH ZÜRICH

Master Thesis: “Human Counts Extraction from Text: Accuracy, Confidence, and Adaptability”

Zürich, Switzerland

ADVISORS: PROF. RYAN COTTERELL, NIKLAS STOEHR, SHEHZAAD DHULIAWALA

Oct 2021 - May 2022

- Propose a socially impactful task and evaluate different models
- Analyze model reliability via calibration and robustness of few-shot and distribution shift settings

Research Project: “Towards Automatic Bias Detection in Knowledge Graphs”

ADVISORS: DR. YASH RAJ SHRESTA, DR. BIBEK PAUDEL, PROF. CE ZHANG

Sep 2020 - Oct 2021

- Conceptualize a novel framework to numerically and aptly inform on what to debias in KGs
- Implement an extensible framework and algorithms for multi-bias definitions

Research Project: “Drug Re-positioning via Text Augmented Knowledge Graph Embeddings”

ADVISORS: PROF. MRINMAYA SACHAN, SHEHZAAD DHULIAWALA, PROF. BIPIN SINGH

Apr 2021 - Nov 2021

- Examined across KG embedding models on the effectiveness of injecting medical entity descriptions
- Proposed two novel evaluation metrics for domain insightful error analysis

Semester Project: Assisting Voting Advice Application with NLP

ADVISORS: PROF. ROGER WATTENHOFER, ZHAO MENG

Oct 2020 - Aug 2021

- Formulated tasks on partisan affiliation and policy agreement classification under a unified transformer model
- Investigated in model interpretability via questions attributions to better understand voting patterns

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

Undergraduate Research Apprentice Program

San Francisco, California, U.S.

SUPERVISORS: PROF. JAE HO SOHN, PROF. YOUNGHO SEO

Sep 2017 - Dec 2018

- Built NLP classifier on clinical history to predict the assignment of intravenous contrast
- Pre-processed 3000+ mammography images and applied CNN models on breast density multi-classification

USC INFORMATION SCIENCES INSTITUTE

Undergraduate Summer Research

Arlington, Virginia, U.S.

DR. WAEL ABDALMAGEED

May 2018 - Aug 2018

- Created an algorithm using OpenCV to detect eye iris on collected 2000+ bio-metric images
- Modularized and customized data partition, model early stopping and evaluation visualization

Teaching Experience

Fall 2021	Artificial Intelligence in Education , Teaching Assistant	ETH Zürich
Fall 2019	Certificate of Advanced Studies in Applied Information Technology , Student Assistant	ETH Zürich
Fall 2018	Principles and Techniques of Data Science , Undergraduate Student Instructor	UC Berkeley

Professional Experience

- 2023 **Scientific Assistant**, Global Health Engineering Group at ETH Zürich
- 2022 **Research Assistant (Part-time)**, Group for Sustainability and Technology at ETH Zürich
- 2019 **Research Intern**, UCSF Bakar Computational Health Sciences Institute
- 2019 **Data Science Intern (Part-time)**, Nissan Research Center

Awards

2018	Departmental Award , UC Berkeley	\$ 6,555
2017	DAAD Scholarship for Research in Science and Engineering , DAAD	\$ 1,300
2017, 2018	The Berkeley Club of Hong Kong Undergraduate Scholarship , UC Berkeley	\$ 20,282

Miscellaneous

Coding: Python(Pytorch/Tensorflow), Java, R, SQL

Languages: English, Chinese(Native), Spanish(B1), German(A2)