

XINGCHEN ZHAO

360 Huntington Ave, Boston, MA 02115

☎ +1-571-525-4502

✉ zhao.xingc@northeastern.edu

🌐 xingchenzhao.com

🐙 github.com/xingchenzhao

Education

Northeastern University

Aug. 2021 – Present

Ph.D., Computer Engineering (Research Interests: Machine Learning, Computer Vision)

Boston, MA

University of Pittsburgh

Jan. 2018 – May. 2021

B.S., Computer Science

Pittsburgh, PA

Preprints

- **Xingchen Zhao**, Xuehai He, Pengtao Xie, “Learning by Ignoring, with Application to Domain Adaptation”, arXiv preprint 2012.14288, 2021.
- Anthony Sicilia, **Xingchen Zhao**, Seong Jae Hwang, “Domain Adversarial Neural Networks for Domain Generalization: When It Works and How to Improve”, arXiv preprint 2102.03924, 2021.

Publications

- Anthony Sicilia, **Xingchen Zhao**, Anastasia Sosnovskikh, Seong Jae Hwang, “PAC Bayesian Performance Guarantees for (Stochastic) Deep Networks in Medical Imaging”, Medical Image Computing and Computer Assisted Intervention (MICCAI), 2021.
- **Xingchen Zhao**, Anthony Sicilia, Davneet Minhas, Erin O’Connor, Howard Aizenstein, William Klunk, Dana Tudorascu, Seong Jae Hwang, “Robust White Matter Hyperintensity Segmentation on Unseen Domain”, International Symposium on Biomedical Imaging (ISBI), 2021.
- Anthony Sicilia, **Xingchen Zhao**, Davneet Minhas, Erin O’Connor, Howard Aizenstein, William Klunk, Dana Tudorascu, Seong Jae Hwang, “Multi-Domain Learning by Meta-Learning: Taking Optimal Steps in Multi-Domain Loss Landscapes by Inner-Loop Learning”, International Symposium on Biomedical Imaging (ISBI), 2021.

Experience

Graduate Research Assistant

Aug. 2021 – Present

Northeastern University

Boston, MA

- Research Areas: Theory and applications in Machine Learning, Computer Vision and Data Mining.
- Advisor: Prof. Yun Raymond Fu

Undergraduate Research Assistant

Jan. 2020 – Jun. 2021

University of Pittsburgh

Pittsburgh, PA

- Research Areas: Computer Vision and Medical Imaging with a focus on Transfer Learning (e.g., Domain Generalization, Domain Adaptation).
- Advisor: Prof. Seong Jae Hwang

Research Intern

Nov. 2020 – Mar. 2021

University of California, San Diego

Remote

- Research Project: Reweight Source Data via Tri-Level Optimization
- Advisor: Prof. Pengtao Xie

Data Manager Intern

Jun. 2019 – May 2020

PittsciVelo

Pittsburgh, PA

- Led the development of sciVelo Salesforce database to track innovation portfolio outcomes such as over 150 projects funding, licensing, intellectual property filing, etc.
- Built dashboards and designed reporting workflow for illustrating outcomes led by the team.
- Our database implementation was selected to be expanded across the campus.

Teaching Assistant

Aug. 2018 – May 2019

University of Pittsburgh

Pittsburgh, PA

- Instructed labs for “Intermediate Programming Using Java.”
- Planned lessons, led discussion sections, held office hours, and graded quizzes and assignments.

Technical Skills

Proficiency: Python, PyTorch, Java, Shell, MATLAB, Git, LaTeX, Git

Familiarity: C, R, SQL, Swift, TensorFlow, Docker, Linux, JavaScript, HTML&CSS, React, Node.js, MongoDB, JUnit

Other Projects

Visual Storytelling with Generated Stick Figures | *PyTorch* | [Link] 2020

- Proposed and implemented a stacked generative adversarial network to randomly create a sequence of moving stick figures that tell stories through their body interactions.

DevExchange | *MongoDB, Express, React, Node.js* | [Link] 2019

- Developed an in-depth full stack social network web application for developers using MongoDB, Express, React, Node.js, Redux.

PittSocial | *Java, PostgreSQL* | [Link] 2019

- Implemented a Java, JDBC and PostgreSQL application program that will operate PittSocial, a Social Networking System (database application) for the University of Pittsburgh.

Quantitative Financial Analysis | *R* | [Link] 2019

- Used R to retrieve, explore and analyze the data of stock, and visualize the stock performance by comparing traditional industrial with non-traditional industrial. Collected data of numerous stocks and created the portfolio optimization.

Awards

- **Undergraduate Research Scholars Award for Summer 2020** - School of Computing and Information (SCI), University of Pittsburgh
- **Dean's List 2018 – 2021** - University of Pittsburgh

Service

- **Reviewer:** IEEE Transactions on Circuits and Systems for Video Technology