

ZHENMEI SHI

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EDUCATION

University of Wisconsin-Madison, US *09/2019-Present*
Ph.D. in Computer Science (Advised by **Prof. Yingyu Liang**)

Hong Kong University of Science and Technology, Hong Kong *09/2015-06/2019*
Bachelor of Science in Major GPA: 4.190 / 4.3
Computer Science and Pure Mathematics Advanced GPA: 3.974 / 4.3 (Top 2%)

ETH Zurich, Switzerland (Exchange) *02/2018-08/2018*

AREA OF INTEREST

Machine Learning Theory, Computer Vision

PUBLICATIONS

On Feature Learning in Neural Networks: Emergence from Inputs and Advantage over Fixed Features

Zhenmei Shi, Junyi Wei, Yingyu Liang Submitted in NeurIPS 2021

Deep Online Fused Video Stabilization

Zhenmei Shi, Fuhao Shi, Wei-Sheng Lai, Chia-Kai Liang, Yingyu Liang Submitted in ICCV 2021
<https://arxiv.org/abs/2102.01279> <https://zhmeishi.github.io/dvs/>

Structured Feature Learning for End-to-End Continuous Sign Language Recognition

Zhaoyang Yang*, Zhenmei Shi*, Xiaoyong Shen, Yu-Wing Tai News
<https://arxiv.org/abs/1908.01341>

Dual Augmented Memory Network for Unsupervised Video Object Tracking

Zhenmei Shi*, Haoyang Fang*, Chi-Keung Tang, Yu-Wing Tai News
<https://arxiv.org/abs/1908.00777> <https://zhmeishi.github.io/DAWN/>

Velocity Vector Preserving Trajectory Simplification

Guanzhi Wang*, Zhenmei Shi*, Cheng Long, Ya Gao, Raymond Wong News
<https://zhmeishi.github.io/paper/VVPTS.pdf> <https://github.com/zhmeishi/VVPTS/>

WORK EXPERIENCE

SDE Intern at **Google YouTube Ads Machine Learning**, Mountain View, CA *05/2021-08/2021*

- Topic: Recommendation System Supervised by: Myra Nam

SDE Intern at **Google Pixel Camera**, Mountain View, CA *05/2020-08/2020*

- Topic: Deep Video Stabilization Supervised by: Fuhao Shi

Research Intern at **Megvii (Face++) Base Model**, Beijing *06/2019-08/2019*

- Topic: Neural Architecture Search. Supervised by: Xiangyu Zhang

Machine Learning Research Intern at **Tencent YouTu**, Shenzhen *12/2018-02/2019*

- Topic: Sign Language Recognition. Supervised by: **Prof. Yu-Wing Tai** News

Machine Learning Research Intern at **Tencent YouTu**, Shenzhen *12/2017-02/2018*

- Topic: Deep Colorization. Supervised by: Prof. Yu-Wing Tai

News

RESEARCH EXPERIENCE

Research Assistant *at* UW-Madison CS School 09/2019 - Present

- Topic: Model Generalization Ability. Supervised by: **Prof. Yingyu Liang**

Research Assistant *at* HKUST CS Department 02/2019-06/2019

- Topic: Video of Tracking. Supervised by: **Prof. Chi-Keung Tang**

Research Assistant *at* **Oak Ridge National Lab**, US 05/2017-08/2017

- Topic: High Performance Traffic Assignment Based on Variational Inequality. **Poster**
Solved Traffic Assignment under global optimizations and tested on supercomputer Beacon.

Part Time Programmer *at* CUHK, HKBU, HKUST 06/2016-08/2016, 04/2017, 12/2018

- Web construction and Web crawler. **GitHub**

TEACHING EXPERIENCE

Teaching Assistant of CS220 (Data Programming I) *at* UW-Madison Spring 2020

Teaching Assistant of CS301 (Intro to Data Programming) *at* UW-Madison Fall 2019

ACADEMIC SERVICES

Conference Reviewer *at* ICCV 2021, CVPR 2021, ECCV 2020

EXTRA-CURRICULAR

Visiting Student *at* Microsoft Research Asia (MSRA) 08/2017

Mentee *at* Hong Kong X-Tech 2017-2018

Vice Chairman *at* Microsoft Student Club @ HKUST 2017-2018

S.S. Chern Class Member *at* HKUST Mathematics Department 2016-2019

Volunteer Teacher *at* Ociva, Maldives 12/2016-01/2017

Software Team Member *at* HKUST Robotics Team 2015-2016

AWARDS & SCHOLARSHIPS

Academic Achievement Medal *from* HKUST 11/2019

CS Departmental Scholarship *from* UW-Madison 09/2019

S.S. Chern Class Achievement Scholarship *from* HKUST Math Department 07/2019

Undergraduate Research Opportunity Program Award *from* HKUST 04/2019

Best Student Team *from* HC2 (Switzerland's Biggest Programming Contest) 03/2018

Champion of Micro Innovation Award *from* Tencent 02/2018

1st Runner-up *from* HKUST x Radica Big Datathon 12/2017

Technology Star *from* Beauty of Programming Competition held by MSRA 08/2017

1st Prize of University's Scholarship for Undergraduate Student *from* HKUST 2016-2019

Reaching Out Award *from* HKSAR Government Scholarship Fund 2017-2018

Exchange Award, Lee Hysan Foundation Exchange Scholarship *from* HKUST 2017-2018

The Cheng Foundation Scholarship for Mainland Students *from* HKUST 2016-2017

Dean's List *from* HKUST 2015-2019

TECHNICAL SKILLS

Python: TensorFlow, PyTorch, Numpy Pandas, BeautifulSoup, re, Spark

C++: Caffe, OpenCV, OpenMP, MPI

Java, MatLab, C, R, SQL, CUDA, \LaTeX , JavaScript, Bash Script