Zhongping Zhang

Phone: +1 (617) 371-7690
Email: zpzhang@bu.edu
Website: https://zhongping-zhang.github.io/
Address: 102 Allston St, Unit 5, Boston, MA, 02134

EDUCATION

Boston University, Boston, MA, US
Ph.D., Computer Science, Sep 2019 - present

University of Rochester, Rochester, NY, US
Master of Science, Electrical Engineering, Sep 2016 - May 2018

Harbin Institute of Technology, Harbin, China
Bachelor of Engineering, Control Science & Engineering, Sep 2012 - July 2016

RESEARCH INTERESTS

Computer Vision, Natural Language Processing, Machine Learning

EXPERIENCES

Boston University — Boston, MA
Research Assistant, IVC Group — Sep 2019 - present
Advisor: *Bryan Plummer*
image similarity and search, image manipulation, defending against machine manipulated media

Kwai Inc. — Palo Alto, CA
Research Intern — May 2020 - Aug 2020
portrait edge detection, image manipulation

Los Alamos National Laboratory — Los Alamos, NM
Research Associate — Jun 2018 - Jan 2019
data mining for geophysics and geology

University of Rochester — Rochester, NY
Research Assistant, VIStA Group — Sep 2017 - May 2018
Advisor: *Jiebo Luo*
image forgery detection, social media data mining and image captioning

Sogou Inc. — Beijing, China
Research Intern — May 2017 - Aug 2017
speech denoising and dereverberating

SELECTED PUBLICATIONS

Zhongping Zhang, Youzuo Lin. "Data-Driven Seismic Waveform Inversion: A Study on the Robustness and Generalization", *IEEE Transactions on Geoscience and Remote Sensing (TGRS), 2020.*

Zhongping Zhang, Youzuo Lin, Zheng Zhou, Tianlang Chen. "Adaptive Filtering for Event Recognition from Noisy Signal: An Application to Earthquake Detection", *IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*, 2019.

Zhongping Zhang, Yue Wu, Zheng Zhou, Youzuo Lin. "VelocityGAN: Data-driven Full Waveform Inversion by Conditional Adversarial Networks", *IEEE Winter Conference on Applications of Computer Vision (WACV)*, 2019.

Zhongping Zhang, Tianlang Chen, Zheng Zhou, Jiaxin Li, Jiebo Luo. "How to Become Instagram Famous: Post Popularity Prediction with Dual-Attention", *IEEE International Conference on Big Data (IEEE Big Data)*, 2018.

Tianlang Chen, **Zhongping Zhang**, Quanzeng You, Chen Fang, Zhaowen Wang,

Hailin Jin, Jiebo Luo. ""Factual" or "Emotional": Stylized Image Captioning with Adaptive Learning and Attention", *European Conference on Computer Vision (ECCV)*, 2018.

Zhongping Zhang, Yixuan Zhang, Zheng Zhou, Jiebo Luo. "Boundary-based Image Forgery Detection by Fast Shallow CNN", *International Conference on Pattern Recognition (ICPR)*, 2018.

Yingchao Meng*, **Zhongping Zhang***, Huaqiang Yin, and Tao Ma. "Automatic Detection of Particle Size Distribution by Image Analysis Based on Local Adaptive Canny Edge Detection and Modified Circular Hough Transform", *Micron*, 2018 (* means equal contribution)

PROFESSIONAL ACTIVITIES

Presentation

- "VelocityGAN: Subsurface Velocity Image Estimation Using Conditional Adversarial Networks", *IEEE Winter Conference on Applications of Computer Vision (WACV)*, Hilton Waikoloa Village, Hawaii, Jan. 2019 (Spotlight)
- "DeepDetect: Earthquake Detection with Convolutional Neural Network", *Joint Meeting on Machine Learning Applications to Seismology*, University of New Mexico, Albuquerque, NM, Aug. 2018. (Invited Talk)
- "Spatial-temporal Densely Connected Convolutional Networks: An Application to CO2 Leakage Detection", *International Exposition 88th Annual Meeting, Society of Exploration, Geophysicists (SEG)*, Anaheim, CA, Oct. 2018. (Oral)
- "Data-driven Methods for Subsurface Velocity Estimation", *Recent Advances in Machine Learning and Computational Methods for Geoscience*, University of Minnesota, Minneapolis, MN, Oct. 2018. (Poster)

Teaching Fellow, Boston University

- 2020 Fall - CS542 Machine Learning
- 2019 Fall - CS101 Introduction to Computer Science

Teaching Assistant, University of Rochester

- 2018 Spring - Circuits & Microcontrollers for Engineers
- 2017 Fall - Introduction to Signals & Circuits

Reviewer

Micron'19; ICPR'18

COURSES

Machine Learning, Optimization Algorithms, Random Computing, Graduate Networks, Formal Method, Algorithmic Data Mining

SKILLS

Languages: Python, MATLAB, R, Java, LaTeX
Frameworks: PyTorch, Keras, TensorFlow, OpenCV
Operating Systems: Linux, Mac OSX, Windows