Zhongping Zhang

Phone: +1 (617) 371-7690
Email: zpzhang@bu.edu
Address: 1110 Commonwealth Ave, Boston, MA, 02215

EDUCATION

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

University of Rochester, Rochester, NY, US
Master of Science, Electrical & Computer 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, Social Media Data Mining, Natural Language Processing

EXPERIENCES

Teaching Assistant (part-time), Greedy Technology
Jan 2019 - April 2019
Help students accomplish the projects of image captioning, object detection, etc.

Post-master Researcher, Los Alamos National Laboratory
Jun 2018 - Jan 2019
Research on *data mining* for geophysics and geology

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

Internship, Sogou Incorporation
May 2017 - Aug 2017, Advisor: *Yiqian Pan*
Research on *speech denoising and dereverberating*

Research Assistant, ADI-HIT Joint Laboratory (Harbin Institute of Technology)
Sep 2015 - May 2016, Advisor: *Jing Luo*
Research on application of ADI-360 *microcontroller*

SELECTED PUBLICATIONS

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)

Zheng Zhou, **Zhongping Zhang**, Yue Wu, Paul Johnson, and Youzuo Lin. "Earthquake Detection in 1-D Time Series Data with Feature Selection and Dictionary Learning ", *Seismological Research Letters (SRL)*, 2018.

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 Assistant, University of Rochester

- 2019 Fall: CS101 - Introduction to Computer Science
- 2018 Spring: ECE210 - Circuits & Microcontrollers for Engineers
- 2017 Fall: ECE101 - Introduction to Signals & Circuits

Reviewer

- Micron
- International Conference on Pattern Recognition 2018 (ICPR)

SKILLS

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