YIQIN ZHAO

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EDUCATION

Worcester Polytechnic Institute, Worcester, MA, USA *August 2019 - Present*
M.S. in Computer Science
Tianjin Normal University, Tianjin, China *September 2015 - June 2019*
B.Eng. in Software Engineering

RESEARCH INTERESTS

- **Mobile Augmented Reality System:** mobile AR lighting estimation, efficient deep learning for AR, mobile system design for AR

- **Computer Graphics and Computer Vision:** photorealistic AR rendering, real world 3D understanding, 3D reconstruction

EXPERIENCE

Worcester Polytechnic Institute, Worcester, MA, USA *August 2019 - Present*
Research Assistant, Advisor: Prof. Tian Guo

- *Research topic:* mobile augmented reality, mobile deep learning, computer system.

- Developed tools and deep learning models on large scale point cloud data.

- Designed efficient and accurate deep learning models for indoor AR lighting estimation.

- Built system for deep learning based on-device mobile AR lighting estimation inference.

Baidu Inc., Beijing, China *July, 2018 - September, 2018*
Software Engineering Intern

- *Job description:* mobile application front-end development for Baidu smart speaker (like Amazon Alex) with hybrid web technologies.

- Closely worked with UI designers and component infrastructure team for designing and developing user interface component library.

- Designed and implemented internal tools for improving testing and debugging workflow.

Tianjin Normal University, Tianjin, China *December 2016 - May 2018*
Undergraduate Research Assistant, Advisor: Prof. Ziping Zhao

- *Research topic*: applied machine learning and affective computing.

- Designed novel deep neural networks that effectively learns the spatial and temporal features of human emotions from speech audio spectrogram signal.

PUBLICATIONS

- **Zhao, Yiqin**, and Tian Guo. "**PointAR: Efficient Lighting Estimation for Mobile Augmented Reality.**" arXiv preprint arXiv:2004.00006 (2020).

- Ziping Zhao, Zhongtian Bao, **Yiqin Zhao**, Zixing Zhang, Nicholas Cummins, Zhao Ren, Björn W. Schuller. **Exploring Deep Spectrum Representations via Attention-Based Recurrent and Convolutional Neural Networks for Speech Emotion Recognition**. IEEE Access 7: 97515-97525 (2019)

- Ziping Zhao, **Yiqin Zhao**, Zhongtian Bao, Haishuai Wang, Zixing Zhang, and Chao Li. **Deep Spectrum Feature Representations for Speech Emotion Recognition**, ASMMC-MMAC'18

- Ziping Zhao, Yu Zheng, Zixing Zhang, Haishuai Wang, **Yiqin Zhao**, Chao Li. **Exploring Spatio-Temporal Representations by Integrating Attention-based Bidirectional-LSTM-RNNs and FCNs for Speech Emotion Recognition**, INTERSPEECH 2018

SKILLS

- Proficient in Python programming

- Proficient in common data science frameworks like: NumPy, Numba, PyTorch

- Proficient in JavaScript programming

- Proficient in modern web frameworks like React.js, Vue.js

- Familiar with Unity3D/Unreal Engine 4

- Familiar with Swift/C# Programming

- Familiar with C/C++ programming

AWARDS AND SCHOLARSHIPS

China Collegiate Computing Contest, Apple Inc., China
This contest is held by Tsinghua University, Zhejiang University and Apple, Inc China to all students from the great China area for developing and designing innovative mobile applications.

- 2017 national third prize, October 2017, top 6% *October 2017*

- 2016 national third prize, October 2016, top 10% *October 2016*

Wang Kechang Culture and Technology Innovation Scholarship, Tianjin Normal University
Fewer than 1% *September 2018*

Tianjin Normal University Scholarship , Tianjin Normal University

- 2018 - 2019 academic first grade scholarship, top 10% *May 2019*

- 2017 - 2018 academic year top grade scholarship, top 5% *September 2018*

- 2016 - 2017 academic year second grade scholarship, top 20% *September 2017*

- 2015 - 2016 academic year first grade scholarship, top 10% *September 2016*

LEADERSHIP

Founder and President of TJNU iOS Club, Tianjin Normal University *2017 - 2018*

- Held biweekly application development and design discussions on campus.

- Led collaborative student activities with Apple Inc. at the local Apple Store.

- Led team to attend national iOS Club summer and winter camps held by Apple Inc.

- Grew the Tianjin Normal University iOS Club to be the largest and most influential student technology club on campus.