

# YIQIN ZHAO

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## EDUCATION

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**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

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- **Mobile Augmented Reality System:** Mobile AR lighting estimation, efficient deep learning for AR, mobile system design for AR
- **Computer Graphics and Computer Vision:** Realistic AR rendering, real world 3D understanding, 3D reconstruction

## EXPERIENCE

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**Worcester Polytechnic Institute**, Worcester, MA, USA

*August 2019 - Present*

*Research Assistant, Advisor: Prof. Tian Guo*

- Develop tools and deep learning models on large scale point cloud data.
- Design efficient and accurate deep learning models for indoor AR lighting estimation.
- Build system for deep learning based on-device mobile AR lighting estimation inference.

**Baidu Inc.**, Beijing, China

*July, 2018 - September, 2018*

*Software Engineering Intern*

- Develop mobile applications for Baidu smart speaker (Amazon Alex like) with modern hybrid web technologies and Android toolchain.
- Closely worked with visual designers for designing and developing user interface component library.

**Tianjin Normal University**, Tianjin, China

*December 2016 - May 2018*

*Research Assistant, Advisor: Prof. Ziping Zhao*

- Focused on applied machine learning and affective computing.
- Designed and implemented a novel deep neural network that effectively learns the spatial and temporal features of human speech emotion from speech audio spectrogram signal.

## PUBLICATIONS

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- **Yiqin Zhao**, Tian Guo, **PointAR: Efficient Lighting Estimation for Mobile Augmented Reality**. HotMobile 2020 Poster
- 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

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- 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

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### **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

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### **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.