

# TIANJING ZHANG

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## 🎓 EDUCATION

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**University of Electronic Science and Technology of China**, Sichuan, China 09/2018 – 06/2022

Bachelor of Mathematics and Physics Basic Science in **Yingcai Honors College**

**GPA: 3.97/4.00**    **Ranked 1/23 (Junior Year)**    **Average Score: 91.2**    CET4: 600    CET6: 536

## 🌟 HONORS AND AWARDS

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**National Scholarship** 2020

**Outstanding Students' Scholarship of UESTC** 2019 & 2020

**Excellent class member of UESTC** 2019 & 2020

**Honorable Mention, Mathematical Contest In Modeling** 2020

**First Prize in Sichuan Province, China Undergraduate Mathematical Contest in Modeling** 2020

**Third prize, Southwest Hackathon Coding Contest** 2020

**Third prize, "Innovation Creativity Entrepreneurship" Competition** 2021

**Yunhui Award Special Finalist, College Student Innovation and Entrepreneurship Program in UESTC** 2021

## 👨‍🔬 RESEARCH EXPERIENCE

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**Image processing and machine learning** 09/2019 – Present

*Based on the traditional optimization method or deep learning method, the research is carried out in the direction of multi-source image fusion and image reconstruction* Studying with Prof. LiangJian Deng, School of Mathematical Sciences, UESTC

**Project: Pulmonary nodule detection based on deep learning** 03/2021 – 06/2021

*Building a multi-scale gradual integration convolutional neural network for pulmonary nodule detection* Studying with Prof. ZhenMing Peng, School of Information and Communication Engineering, UESTC

**Project: Path prediction of substation patrol route** 02/2021 – 01/2021

*Established a path prediction model and designed the neural network based on attention mechanism to realize the path prediction of substation staff* Working with Prof. Liang Li, School of Mathematical Sciences, UESTC

**Attend the 4th International Conference in Biolinguistics** 2019

**Project: Redox reaction simulation of fuel cell** 09/2018 – 09/2019

*Research on the oxidation reaction inside the battery by using the software COMSOL.* Working with Prof. TingShuai Li, School of Materials and Energy, UESTC

## ♡ JOURNAL AND CONFERENCE

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1. **Tianjing Zhang**, LiangJian Deng, Ting-Zhu Huang, Gemine Vivone and Jocelyn Chanussot. "Pansharpening via Triple-Double convolutional neural network." Submitted to IEEE Transactions on Neural Networks and Learning Systems (TNNLS). **(Major Revision)**
2. **Tianjing Zhang**, LiangJian Deng, ZhongCheng Wu and ChaoChao Zheng "An iterative approach for image fusion with dynamic gradient sparsity and anisotropic spectral-spatial total variation." Submitted to Signal, Image and Video Processing. **(Major Revision)**

3. ZiRong Jin, **TianJing Zhang**, Cheng Jin and LiangJian Deng. “Weighted shallow-deep feature fusion network for pansharpening.” In 2021 IEEE International Geoscience and Remote Sensing Symposium (IGARSS 2021). (**Accepted**)
4. ShiShi Xiao, Cheng Jin, **TianJing Zhang**, Ran Ran and LiangJian Deng. “Progressive band-convolutional neural network for pansharpening.” In IEEE International Geoscience and Remote Sensing Symposium (IGARSS 2021). (**Accepted**)
5. YuDong Wang, LiangJian Deng, and **TianJing Zhang**. “SSconv: Explicit Spectral-to-Spatial Convolution for Pansharpening.” Submitted to 2021 ACM International Conference on Multimedia (ACM MM 2021). (**Accepted**)
6. ZiRong Jin, LiangJian Deng, **TianJing Zhang** and XiaoXu Jin. “BAM: Bilateral Activation Mechanism for Image Fusion.” Submitted to ACM MM 2021. (**Accepted**)
7. Wu Xiao, TingZhu Huang, LiangJian Deng and **TianJing Zhang**. “Dynamic Cross Feature Fusion for Remote Sensing Pansharpening” Submitted to 2021 IEEE International Conference on Computer Vision (ICCV 2021). (**Accepted**)
8. **TianJing Zhang**, ZiRong Jin, LiangJian Deng, and TaiXiang Jiang. “Title unavailable due to Non-disclosure Agreement.” Submitted to AAAI Conference on Artificial Intelligence (AAAI 2022)
9. **TianJing Zhang**, LiangJian Deng, TingZhu Huang, and BiHan Wen. “Title unavailable due to Non-disclosure Agreement.” Submitted to AAAI Conference on Artificial Intelligence (AAAI 2022)
10. Xiao Wu, TingZhu Huang, **TianJing Zhang**, and LiangJian Deng. “Title unavailable due to Non-disclosure Agreement.” Submitted to AAAI Conference on Artificial Intelligence (AAAI 2022)
11. ZiRong Jin, YuWei Zhuo, **TianJing Zhang**, XiaoXu Jin and LiangJian Deng. “Parallel Full Depth Feature Fusion Network for Pansharpening.” Submitted to IEEE Transactions on Geoscience and Remote Sensing

## ♥ ACADEMIC ACTIVITIES

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**Peer Review:** IEEE Transactions on Geoscience and Remote Sensing (IEEE TGRS)

**Peer Review:** IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing (IEEE JSTARS)

**Video Presentation:** Record video report on ACM Multimedia 2021

## ♥ WORKING EXPERIENCE

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Supervising student of Basic Mathematics and Physics Class	2020 & 2021
Student Assistant of Yingcai Honors College	2019, 2020 & 2021
Psychological Committee	2020 & 2019
Psychological Director of the College	2020 & 2019
Student Assistant of the Youth League Committee	2018

## 🐾 PROFESSIONAL COURSE GRADE

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Mathematics and creativity:	97	Advanced Programming Language:	97	Artificial Intelligence:	95
Probability and Statistics:	95	Complex Function:	95	Discrete Mathematics:	94
Mathematical Modeling:	94	Machine Learning:	93	Advanced Calculus:	92

## 🐾 SKILLS

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**Programming:** MATLAB, Python (Pytorch, Tensorflow), C language, SQL, COMSOL

**Research software:** LaTeX, PowerPoint, Excel, Word, Origin