

## EDUCATION

- Xidian University** Xi'an, China  
*Bachelor of Artificial Intelligence* 09/2020 - Present  
*Turing Class* (Select 40 students from 1450 undergraduate students.)  
**GPA: 3.8/4.0**, CET-4: 594, CET-6: 572  
**Selected courses:**  

Advanced Mathematics A(I)	98	Advanced Mathematics A(II)	98	C Programming	100
Discrete Mathematics (I)	92	Probability and Mathematical Statistics	91	Python Programming	95
Digital Signal Processing	92	Signals and Systems	94	Fundamentals of Circuit Analysis	95

## RESEARCH EXPERIENCE

- Human Motion Prediction** 11/2022—03/2023  
 I was honored to closely collaborated with schoolmates on exploring a novel paradigm for human motion prediction.
  - Designed the **mask-completion** strategy to overcome discontinuity in prediction.
  - Obtained a deeper understanding of the **diffusion model** and other generative models.
  - Achieved better motion **editability**, enabling switching and controllable prediction in training free manner.
- Radio Frequency Machine Learning** 09/2021-Present  
 I work as a research intern at the IPIU lab, supervised by Prof. Shuyuan Yang and Prof. Zhixi Feng.
  - Followed and focused on the development of **automatic modulation classification**.
  - Accumulated processing experience and techniques related to **time series**.
  - Worked **independently** on exploration, experiment and writing and enhanced research skills.

## PROJECT EXPERIENCE

- Embedded Human Pose Estimation** 04/2023—07/2023  
 Under the guidance of Prof. Weisheng Dong, I deployed human pose estimation models on an ultra-low-power microprocessor.
  - Explored and implemented deep learning-based **human pose estimation** methods.
  - Conducted the entire process of **model lightweight deployment**, starting from PyTorch, using TinyNeuralNetwork, TinyEngine, and OpenMV.
  - Deployed lightweight-Openpose and Movenet on an STM32H743 with **only 1MB RAM and 2MB Flash**.  
[report]

## PUBLICATIONS

- Towards the Automatic Modulation Classification with Adaptive Wavelet Network**  
**Jiawei Zhang**, Tiantian Wang, Zhixi Feng, Shuyuan Yang  
**IEEE Transactions on Cognitive Communications and Networking (JCR-Q1, IF=8.6)**  
 [paper] [code]
- HumanMAC: Masked Motion Completion for Human Motion Prediction**  
 Ling-Hao Chen\*, **Jiawei Zhang\***, Yewen Li, Yiren Pang, Xiaobo Xia, Tongliang Liu  
 International Conference on Computer Vision (**ICCV**), 2023  
 [paper] [code] [homepage]

## HONORS AND AWARDS

- Chinese National Student Scholarship** 09/2022
- Kaggle: G2Net Detecting Continuous Gravitational Waves Silver Medal (Top 5%)** 01/2023
- Finalist Winner** (First prize), International Mathematical Contest in Modeling (MCM/ICM) 05/2022
- First Prize**, China Undergraduate Mathematical Contest in Modeling (CUMCM) in Shaanxi Province 11/2021
- Outstanding Student at the School Level** 09/2021

## SKILLS SUMMARY

- Languages** Python, C, Matlab
- Frameworks** Pytorch, GNU Radio
- Soft Skills** L<sup>A</sup>T<sub>E</sub>X, PyCharm, Linux and shell, Git

## VOLUNTEER EXPERIENCE

- Mentor of Technology Group at Tencent Innovation Club** Xi'an, China  
 Organize technical salons where student members share their research of interest. 12/2021-09/2022