Jianxing Chen

jc6183@columbia.edu | (+86) 159-2801-0985

EDUCATION

University of Electronic Science and Technology of China (UESTC)

Chengdu, China

Bachelor of Engineering in Communication Engineering

Aug 2021 – Jun 2025

- GPA: 3.72/4.0
- Selected courses: Circuit Analysis and Design, Signals and Systems, Electromagnetic Fields and Microwave Technologies, Digital Signal Processing, Artificial Intelligence and Machine Learning, Stochastic Signal Analysis, Digital Image Processing, Advanced Digital Communication

RESEARCH EXPERIENCE

Autonomous Vehicle Project

Chengdu, China

Instructor: Professor Hanaa Abumarshoud

Mar 2024 - Jun 2024

- Developed a vision module for an autonomous vehicle using YOLO-based image recognition and integrated it with the vehicle's control system for real-time decision-making.
- Optimized the training platform and dataset, enhancing model accuracy and ensuring robust performance on the K210 chip.

Dynamic Masked Transformer for Human-Object Interaction Detection

Chengdu, China

Instructor: Professor Zhang Yin

Jun 2024 – Jun 2025

- Designed and implemented a transformer-based HOI detection model using Python and Pytorch, achieving a mAP score of 33.65 on the HICO-DET dataset.
- Integrated a learned query mechanism for dynamic feature selection, significantly outperforming mainstream methods.
- Implemented a hard masking technique for transformer to enhance the robustness.

PROFESSIONAL EXPERIENCE

China Telecom

Jiujiang, China

Cloud Computing Team

Jul 2022 – Aug 2022

- Assisted in daily operation and maintenance tasks, gaining hands-on experience in cloud computing systems and network security.
- Participated in enterprise data-to-cloud migration projects.

Shenzhen Smart City Technology Development Group

Communication and IoT Team

Shenzhen, China

Mar 2025 - Jun 2025

- Key contributor to R&D of vLLM-powered smart cameras for fire detection and emergency response in smart cities.
- Contributed to model training and fine-tuning, embedded systems, and Linux-based edge AI development.
- Participated in the project of perceptual system for Shenzhen, working on data pooling

EXTRACURRICULAR ACTIVITIES

Teacher-Student Symposium Organizer

Chengdu, China

Sep 2022 - Jun 2024

- Organized biweekly teacher-student symposiums, and handled event planning, communication, and logistics. Drafted and published post-event articles to foster communication.
- Coordinated with faculty members and participants, enhancing my leadership and management skills.

SKILLS

- Programming Languages & Software: MATLAB, Python, C, Java, Linux, HFSS
- Equipment: Oscilloscope, Waveform Generator, Hikvision Camera, Yabo Vision Module, Jetson Orin NX

HONORS AND AWARDS

- Outstanding Student Scholarship, UESTC (2021-2024)
- Meritorious Award, The Mathematical Contest in Modeling (2022)