Zeyu Zhang

zeyuzhangzyz@gmail.com · (+86) 177-3192-2807 ·

Education

Huazhong University of Science and Technology, Wuhan, China — Sep. 2020 – Jun. 2024

Bachelor of Engineering in Electronics Engineering (EE)
Advanced Class in Mathematics and Physics for Information Science
Score: 90.5 **GPA: 3.92/4** **Rank: 1/30** **IELTS: 6.5**

Honors and Awards

- National Scholarship×2 — Oct. 2021, Oct. 2023
  Top 2% - Highest honor for undergraduates in China
- Merit Student×2 — Oct. 2021, Oct. 2023
  Top 5% - Excellent student in our university
- Outstanding Undergraduates in Term of Academic Performance — Oct. 2021
  Top 1% - Highest honor for undergraduates in HUST
- *The first prize* in the 13th Mathematics Competition for Chinese University Students — Dec. 2021
- ***Top 1%*** in Alibaba Global Mathematics Competition — Apr. 2022
- *The second prize* in Interdisciplinary Contest in Modeling (ICM) — Jun. 2022
- *The second prize* of Hubei Area in National University Mathematical Modeling Competition — Oct. 2022

Experience

Team Project — Jan. 2022 – Jan. 2023

I am the Head of the National Undergraduate Training Program for Innovation and Entrepreneurship, supervised by Prof. Yang. We mainly study the combination of video analytics and edge computing, using edge nodes to assist video encoding. We completed three patents, which are under review and I am the second author (first student author) of one patent.

Peng Yang, **Zeyu Zhang**, Ziwei Zheng, Chuqin Zhou, "An End-Edge Collaborative Boundary Frame Filtering Method for Machine Vision," submitted on August 31, 2022 (under review).

Publication — Aug. 2022 – Jan. 2023

Chuqin Zhou, Peng Yang, **Zeyu Zhang**, Chengzhi Wang, and Ning Zhang, "Bandwidth-Efficient Edge Video Analytics via Frame Partitioning and Quantization Optimization," ICC 2023 - IEEE International Conference on Communications, doi: 10.1109/ICC45041.2023.10279708.

Online Learning — Apr. 2023 – Dec. 2023

These experiments were carried out in the context of large-scale camera systems for smart cities. Our proposed system achieved superior performance on both fixed and mobile cameras, showcasing its adaptability to limited resources and dynamic video content. (under review)

Research Assistant — Jan. 2024 – Apr. 2024

We consider different DNN models on different video sources to adapt the bandwidth and capacity resources. (under review)

Skills

- Programming Languages: C++, Python, and Matlab
- Strong mathematical and modeling foundation, Bandit theory, Online Learning theory
- Image Objection by Pytorch