

XUAN WU

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PERSONAL STATEMENT

I'm currently a junior student at the Department of Nuclear Science and Technology at USTC. Due to my enthusiasm in computer science, I chose to pursue it as a minor from this semester (2024.02) while majoring in Nuclear Science. In my spare time, I self-studied machine learning, reinforcement learning and other AI technologies, which can support further research in computational physics. Addition to my academic pursuits, I also keep the hobby of cycling and jogging, which I believe can contribute to my physical and mental strength, guaranteeing me for high intensity scientific research.

EDUCATION

B.S. at University of Science and Technology of China

2021.09-2025.06 (expected)

Major in Nuclear Engineering & Technology

Minor in Computer Science & Technology

Overall GPA: 3.54/4.3

Department Ranking: 10/23

CET4: 626

CET6: 552

Related Courses: Mathematical Analysis B(91), Computational Method(95), Atomic Physics A(90), Electrodynamics (85), Introduction to Plasma Physics(83), Quantum Mechanics B(93)

PROJECT

CT Image Restoration Based on ResNet

2023.10-2023.11

- Build a ResNet(16 levels) based on TensorFlow
- Able to denoise CT images with quantum noise and electronical noise
- Increase average PSNR from 70.2 to 76.0

Embodied Intelligence Research

2024.02-2024.05

- Supervised by Prof. Xianghang Mi
- Conduct research on several embodied AI benchmarks, including Calvin, LoHo-Ravens, Arnold, etc.
- Debug and run project code to reproduce the result

5-stage Pipeline CPU Based on Verilog

2024.03-2024.04

- Lab of COD course
- Able to tackle data hazard and control hazard

TECHNICAL STRENGTHS

Computer Languages

C/C++, Python, Matlab, Verilog

Tools

Git, L^AT_EX, PyTorch, Linux

INTERESTS

Machine Learning

Computational Physics