

Wanyang Yu

yuwy_23@mail.ustc.edu.cn | github.com/Cecelia-Yu

Education

2023.09–2027.06 **University of Science and Technology of China**
Expected graduation: June 2027
B.E. in Computer Science and Technology · Hua Xia Talent Program · Hefei, China
GPA: 3.86/4.3 · Weighted average: 89.76/100 · Rank: 23/236
Transferred from the Division of Life Sciences and Medicine (2023) to the School of Computer Science (2024).

Research Experience

- 2026.07–Present **Exploring the Task Space of Embodied Assistance**
Human Computer Integration Lab · University of Chicago
Advisor: Prof. Pedro Lopes
- Developing visual closed-loop control for parallel electrical muscle stimulation.
 - Conducting behavioral and user studies with blind and low-vision participants.
- 2025.10–2026.02 **Longitudinal Brain MRI Prediction via Diffeomorphic Deep Learning**
National Engineering Lab for Brain-inspired Intelligence Technology
Advisor: Prof. Aiping Liu
- Designed DRIFT, a two-stage framework for predicting follow-up brain MRIs from baseline scans using a conditional 3D U-Net to generate diffeomorphic velocity fields.
 - Achieved a 78–83% MSE reduction over state-of-the-art methods on 3,926 UK Biobank longitudinal pairs, with interpretable Jacobian maps and velocity fields localizing regional atrophy.
 - Independently led problem formulation, model design, all experiments, and manuscript writing.
- 2025.06–2026.01 **mmWave Radar-Based Passive Sensing and Communication System**
Lab for Intelligent Networking and Knowledge Engineering
Advisor: Prof. Yubo Yan
- Conducted electromagnetic simulations and parameter optimization for radar sensing; designed and validated hardware prototypes.
- 2025.03–2025.06 **LLM-Empowered Memory Management Optimization Framework**
Operating Systems (H) · Course project
Advisor: Prof. Kai Xing [GitHub](#)
- Led a five-person team to build a predictive framework using locally deployed Llama 3-8B-Instruct to anticipate user behavior for system-level memory pre-allocation, achieving approximately 70% accuracy on web tasks.
- 2024.01–2024.10 **VEGFR-like Surface Display on *E. coli* for Tumor Inhibition**
iGEM · Presented at the Grand Jamboree, Paris
Advisor: Prof. Jiong Hong
- Contributed to experimental design and data analysis; led scientific communication and the team presentation.

Selected Coursework

Brain–Computer Interface: 95
Operating Systems (H): 95
Stochastic Processes B: 92
Probability & Mathematical Statistics: 91
Compiler Principles (H): 86
Collegiate Psychology: A+

Technical Skills

Programming & tools: Python, C/C++, Verilog HDL, MATLAB, Codex
Machine learning: PyTorch, MindSpore; 3D medical image analysis and generative models
Neuroscience: Familiar with EEG/fMRI experimental paradigms and analysis methodology
Hardware: KiCad, Ansys HFSS, Advanced Design System

Honors and Awards

2026	Computer Science Summer Research Program Fellowship
2025	USTC Excellent Student Scholarship
2024	USTC Rose Scholarship (top 1%)
2024	Scholarship for Hua Xia Talent Program in CS&T — Class A
2023	USTC Alumni Foundation High School Scholarship Award

Leadership and Activities

2025 – 2026	President, USTC Literary Society
2025	Outstanding Team & Individual, Winter Break Social Practice
2024	Excellent Mental Health Advocate