WANG TIANQI

✉ wangtianqi@mail.dhu.edu.cn · ☎ (+86) 180-3132-3733 · ⌂ Github · ⌂ Website

EDUCATION

Donghua University, Shanghai   Sep. 2022 – Jun. 2026 (Expected)

B.Eng. in Intelligent Science and Technology, School of Computer Science and Technology

- **GPA**: 3.93/5.00 (Weighted Average: 89.3/100)   **Major Rank**: 5/35   **School Rank**: 30/294
- **Honors**: NITORI International Scholarship (Top 5%), Outstanding Student Award (Top 5%)
- **Key Courses**: Deep Learning and Applications (99), Optimization Theory (98), NLP (96), Big Data Technology (96)

RESEARCH EXPERIENCE

Precise Spiking Neurons for Fitting Any Activation Function in ANN-to-SNN Conversion

Applied Intelligence (SCI Q2), 2025, Co-first Author

- Proposed the Precise Spiking (PS) neuron model enabling accurate, low-latency conversion from ANNs with arbitrary activation functions to SNNs.
- Achieved state-of-the-art (SOTA) results on image and text datasets with minimal accuracy loss (as low as 0.55%).

Early Diagnosis and Prognosis of Alzheimer′s Disease via Kolmogorov-Arnold Networks

- Optimized Kolmogorov-Arnold Networks (KAN) for neurodegenerative disease prediction using the ADNI dataset.
- Integrated statistical analysis methods for early detection and prognosis of Alzheimer's disease.

PROJECTS

FieldVision: Smart Tracking & Tactical Analysis for Soft Hockey   Jan. 2025 – Present

AI Model & Algorithm Design, System Development   AI Practice Project

- Improved multi-object tracking algorithm to enhance recognition under occlusion.
- Employed RAG-augmented LLMs to auto-generate tactical reports based on predefined logic.
- Built system with Vue, FastAPI, and Vite; deployed backend services and developed frontend visualizations.
- Technologies: FairMOT, RAG, LLM

COMPETITIONS AND AWARDS

- MCM/ICM (Mathematical Contest in Modeling) – **M Award (First Prize)**   May 2024
- MathorCup Big Data Challenge – **First Prize**   Dec. 2023
- HuaShuCup National Math Modeling – **Second Prize**   Aug. 2023
- HuaShuCup International Math Modeling – **H Award (Second Prize)**   Jan. 2025
- Shanghai Regional Math Modeling Contest – **Third Prize**   Nov. 2023
- Shanghai Collegiate Programming Ability Contest – **Third Prize**   Jun. 2024
- Jinma Five-Schools Programming Contest – **Bronze Medal**   May 2023

INTERDISCIPLINARY TRAINING

Elite Innovation Program in Industrial Big Data & Intelligent Systems   Mar. 2024 – Apr. 2025

Selected as 1 of 20 university-wide undergraduates. Studied smart manufacturing, industrial big data, robotics; participated in real-world interdisciplinary AI projects.

Cross-disciplinary Preparation: CS, Math, Biology   Sep. 2022 – Jun. 2026 (Expected)

- **Self-directed Learning**: Pursued additional coursework in math and biology alongside CS major.
- **Completed**: Graph Theory, Complex Functions, Cell Engineering (Avg: 93), Cognitive Psychology & Neuroscience (Grade A); **Planned**: Numerical Analysis, Multivariate Analysis, Nonparametric Statistics, PDEs, Operations Research, Medical Fundamentals

SKILLS

Proficient in **Python/PyTorch** for deep learning; familiar with C++; experienced in full-stack development; Skilled in Linux, Git, LaTeX, and SPSS. Certified in AI (Level 4), Shanghai Higher Education IT Exam.