

Education

Tongji University <i>B.E in Communication Engineering</i>	<i>Sep. 2021 – Jul. 2026 (expected)</i>
<ul style="list-style-type: none"> ◦ GPA: 91.3/100 Overall rank: 1/69 (currently) ◦ A+ Courses: Principles of Communication(Full Marks), Machine Learning and Data Processing, Signal and System, Digital Signal Processing, Physics Principles in Medicine, Probability and Mathematical Statistics, High-Level Language Programming, Neuroscience and Neuropsychiatry Disorders, etc. 	

Publications

A Comprehensive Model of External and Internal Interference in Neural Communication Systems for Enhanced IoNT Performance <i>Jiang Boyu</i> , Jin Zhuoqun, Usman Riaz Muhammad, Abd El-atty Saied, Liu, Fuqiang, Lin Lin <i>IEEE Internet of Things Journal (IF=8.2, JCR Q1, 97%)</i>	10.1109/JIOT.2025.3541150 🔗
An Engineered Neural Communication System Based on CDM Scheme for the Internet of Bio-nano Things Jin Zhuoqun, Chen yao, <i>Jiang Boyu</i> , Lin Lin <i>IEEE Transactions on Molecular, Biological, and Multi-Scale Communications (JCR Q2)</i>	Minor Revision (Revised Manuscript Submitted)
Clock Synchronization of IoBNT Using Self-Sustaining Oscillations via Protein Circuit Design <i>Jiang Boyu</i> , Yu Wenlong, Lin Lin <i>IEEE Internet of Things Journal (IF=8.2, JCR Q1, 97%)</i>	Under Review
Patent: Control Method, System, Storage Medium and Terminal for a Robot for Engine Inspection Peng Qi, <i>Jiang Boyu</i> , Sun Yujie (Student First Author)	Substantive Examination Stage, Mar. 2023
Patent: An Intelligent Traffic Signal Control Method, System, and Program Product Based on Agent-ARIMA Peng Qi, <i>Jiang Boyu</i> , Ke Yusong, Bu Xiaosheng (Student First Author)	Substantive Examination Stage, Jan. 2025

Project Experience

Clock signal design in IoBNT based on protein oscillation. <i>Supervisor: Prof. Lin Lin</i> 🔗	<i>Tongji University Sep. 2024 - Current</i>
<ul style="list-style-type: none"> ◦ Designing protein oscillators based on protein circuit. ◦ Simulation and evaluation the clock signal in molecular communication systems. 	
Artificial cell division based on the oscillation by De Novo protein design <i>Supervisor: Prof. Zibo Chen</i> 🔗 (Science & SciLifeLab Prize Awardee)	<i>Wetlake University Jun. 2024 - Oct. 2024</i>
<ul style="list-style-type: none"> ◦ Quantitative analysis of oscillatory phenomena based on computer vision. ◦ Segmentation and statistics using SAM and Fiji for confocal microscopy cellular imaging. ◦ Modeling protein circuits and diffusion processes based on ODEs. 	
A Neural Communication System to the Detection of Neurological Diseases <i>Supervisor: Prof. Lin Lin</i> 🔗	<i>Tongji University Nov. 2023 - Current</i>
<ul style="list-style-type: none"> ◦ Construction of an experimental platform for nerve information transmission based on bullfrog sciatic nerve. ◦ Design, processing, and testing of neural communication system. 	
AeroEye: Intelligent Aero Engine Inspection System Based on Snake-like Robot <i>Supervisor: Prof. Peng Qi</i> 🔗	<i>Tongji University Nov. 2022 - Current</i>
<ul style="list-style-type: none"> ◦ Leader of the National Undergraduate Training Program for Innovation. ◦ Selected for a poster presentation at the National Undergraduate Innovation Conference. ◦ Aero-engine damage recognition and classification based on computer vision. ◦ Design and testing of IoT system of the robot. 	

Selected Honors and Awards

- **National Scholarship** for Undergraduate Students (*Top 0.4%*), Dec. 2024.
- **Grand Prize**, Huawei ICT (Information and Communication Technology) Competition Global Final (*Top 0.03%, flagship projects of key partners of the UNESCO Global Skills Academy*), May 2024.
- **First Prize**, East China Division of National University Student IoT Design Contest, Aug. 2023.
- **Gold Award**, China International College Students' Innovation Competition (Shanghai Division), Nov. 2024.
- **First Prize** of COMAC's Operation Support Competition (The only finalist project submitted by university), Dec. 2024.
- Second Prize in the 6th Global Campus Algorithmic Elite Competition on Artificial Intelligence, Dec. 2024.
- The distinguished B. E. academic scholarship in Tongji University (**twice**), 2022 & 2023.
- The distinguished social work and activity scholarship in Tongji University (**three times**), 2022, 2023 & 2024.

Miscellaneous

Programming Languages: Python, LaTeX, C/C++, MATLAB, Verilog HDL.

Language Proficiency: CET 6: 519, IELTS: In preparation

Societal Responsibility and Leadership Ability:

- Outstanding Student Leader in Tongji University (*Top 1%*), Nov. 2024.
- Sessional volunteer for Hongqiao Forum of the 5th China International Import Expo (*Sessional secretary of Intel China Vice President*).
- Head of Department, Student Science and Technology Association, Tongji University.

Diversity & Outreach:

- Featured in China Media Group CGTN's annual documentary *China: Race to the Future* [🔗](#) (Already released globally in 4K in five languages).
- International Summer School in Italy (Lectures and Academic Exchanges at Politecnico di Torino, University of Bologna, etc.), Jul. 2024
- CIBR (Chinese Institute for Brain Research, Beijing) Winter School, Jan. 2025