# Zian Chen (English Name: Adam Fitz)

Tel: +86 18192323121 | Email: zianchen@mail.nwpu.edu.cn | Homepage: https://fitz798.github.io

#### Education

#### Northwestern Polytechnical University (NPU)

Sep. 2023 – Mar. 2026(Expected)

- M.Eng. Information and Communication Engineering (ETP) GPA: 3.9/4.1 RANK: 1/62
- National Scholarship (Top 2%) | Academic First Class Scholarship (Twice) | First Class Scholarship
- Wireless Communication and Navigation Laboratory (WiCAN LAB) Third Class Scholarship | Aerospace Electromagnetic Cognition and Utilization Institution (AECU INS) Second Class Scholarship
- · Outstanding Graduate Student
- Main Courses: Matrix Theory(100), Mathematical Statistics(97), Bid Data Analysis and Mining(95), Information Theory and Coding(95), Modern Communication Theory(95), Computer Communication Networks(94)
- Research Interests: Artificial Intelligence(AI), Integrated Sensing and Communication(ISAC), Unmanned Aerial Vehicle(UAV), Reconfigurable Intelligent Surface(RIS), Physical Layer Security(PLS)

#### Northwestern Polytechnical University (NPU)

Sep. 2019 - Jun. 2023

- B.Eng. Electronics and Information Engineering (ETP) GPA: 3.7/4.1 RANK: 2/7
- National Encouragement Scholarship (Top 3%) | Academic Second Class Scholarship
- Outstanding Undergraduate Student | Excellent Speaker, "We Talk" Workshop
- Academic Excellence Outstanding Individual (Twice) | Self-striving & Persevering Outstanding Individual | Diligent & Erudite Outstanding Individual
- Main Courses: Calculus I/II/III(100), Computing Method(100), Complex Function and Integral Transformation(100), Microwave and Radio Circuits(97), Fundamentals of Analog Electronics(97), Linear algebra(95)

## **Paperwork and Patents**

- [C<sub>1</sub>] **Zian Chen**, Qian Xu, et al. ISAC-OTFS Enabled Secure Transmission Against Co-Existing Internal and External Eavesdroppers in Vehicular Networks [C], 2025 IEEE 8th International Conference on Electronic Information and Communication Technology (ICEICT 2025). (*EI*, *Accepted*)
- [J<sub>1</sub>] Qian Xu, **Zian Chen**, et al. Anti-Jamming Design for Sensing-Assisted Reliable Orthogonal Time Frequency Space Communications [J], IEEE Wireless Communications Letters. (*SCI Q1, Under Review*)
- [P<sub>1</sub>] Qian Xu, **Zian Chen**, et al. A Highly Reliable and Secure Transmission Method Based on OTFS [P], Invention Patent in China. (Patent No.CN119276674A)
- [P<sub>2</sub>] Xin Yang, **Zian Chen**, et al. An Anti-Jamming Implementation Approach for Integrated Sensing and Communication Waveform [P], Invention Patent in China. (Patent No.2025107315462)
- [P<sub>3</sub>] Qian Xu, **Zian Chen**, et al. A Secure Transmission Scheme Based on Self-Interference Cancellation Mechanism [P], Invention Patent in China. (Patent No.202418000868.6)
- [P<sub>4</sub>] Qian Xu, **Zian Chen**, et al. A Secure Multiple Access Method Based on Multi-Carrier Modulation [P], Invention Patent in China. (Patent No.202418000872.2)
- [P<sub>5</sub>] Qian Xu, **Zian Chen**, et al. A Spectrum Efficient Secure Transmission Scheme Based on Orthogonal Time Frequency Space Modulation [P], Invention Patent in China. (Submitted)
- [P<sub>6</sub>] Qian Xu, **Zian Chen**, et al. A Secure Transmission Approach Enpowered by Multi-Dimensional Sensing [P], Invention Patent in China. (Submitted)

#### Awards (Selected)

China Graduate Contest on Smart-city Technology and Creative Design Competition
Oct. 2024
National Third Prize (*Team Leader*)

• "Challenge Cup" National College Student Extracurricular Academic Science and Technology Works Competition

May. 2025

Shaanxi Province Grand Prize	
• "GigaDevice Innovation Cup" National Graduate Student Electronic Design Competition	Jul. 2023
Northwest China Regional First Prize (Commercial Track)	
• "GigaDevice Innovation Cup" National Graduate Student Electronic Design Competition	Aug. 2024
Northwest China Regional Second Prize (Technical Track)	
• "Aviation, Aerospace & Navigation Cup" Innovation Competition (A Class)	Mar. 2024
University-Level First Prize (Team Leader)	
Youth League Commendation Series	Apr. 2025
University-Level Top10 "Flag Youth League Branch" (First Place, Team Leader)	
• "Youth in a Prosperous Era, Striving in Prime Time" Annual Excellence Selection Series	Oct. 2024

University-Level Top10 "Model Class" (¥10,000 Funding Awarded, Team Leader)

## Projects (Selected)

Multi-Dimensional Joint Secure Transmission for UAV-Ground Communications	Apr. 2022 – Present
• National Natural Science Foundation (No.62201462)	(Student Leader)
• Key words: Orthogonal Time Frequency Space; Beamforming and Precoding Design	
Resource Optimization Theory for UAV-Aided Multi-User Secure Communications	Mar. 2024 – Present
• Young Talent Fund of Association for Science and Technology (No.20240148)	(Student Leader)
• Key words: Non-Orthogonal Multiple Access; AI-Driven Non-convex Optimization	
Interference Signal Analysis and Prediction Technology (Completed)	Sep. 2024 – Jul. 2025
University-Institution Joint Innovation Fund	(Core Member)
• Key words: Intelligent Situational Awareness; AI-Driven Decision Making	
Cell-free Massive MIMO Edge Intelligence Technology (Completed)	Oct. 2022 – Oct. 2023
• National Innovation Project (No.TQ0331TS01023)	(Technical Leader)
• Key words: Reconfigurable Intelligent Surface; Edge Offloading and Computing	
Cooperative Beamforming Enhanced 5G/B5G Mobile Communications (Completed)	Jun. 2021 – Jun. 2023
• Postgraduate Innovation and Practice Fund Project in Shaanxi Province (No.S202110699420)	(Project Manager)
• Key words: Coordinated Multiple Points; Cellular Interference Elimination	

## Experiences (Selected)

Interns	hi	n	•
111111111111111111111111111111111111111	ш	М	•

• FPGA Embedded Development, Huarui Hengtai Tech. Co., Ltd – Guangzhou, China	Sep. 2024 - Oct. 2024
• Huawei Certified ICT Associate, Xiantong Network Tech. School – Xi'an, China	Jul. 2021 – Aug. 2021
• Robotics Training, Robot Center, NPU – Xi'an, China	Mar. 2021 - Jun. 2021
Student Work:	
• Graduate Class President, School of E&I, NPU – Xi'an, China	Sep. 2023 – Present
• Undergraduate Dean's Office Assistant, School of E&I, NPU – Xi'an, China	Feb. 2025 – Jul. 2025
• Teaching Assistant, Fundamentals of Analog Electronics, NPU – Xi'an, China	Sep. 2023 – Jan. 2024
• Teaching Assistant, Machine Learning: Principle and Application, NPU – Xi'an, China	Jun. 2023 – Aug. 2023

## **Skills**

- Natural Languages: Mandarin (Native), English (CET4: 591/710; CET6: 520/710)
- **Programming Languages:** Matlab, Python, C/C++, G(Graphic)
- Drawing Softwares: Matlab, Origin, Visio, PowerPoint
- Machine Learning Algorithms: Neural Network(CNN, GNN), Deep Reinforcement Learning(DDPG, TD3, Twin-TD3), Long Short Term Memory Network (LSTM)