

# Junchi Liu

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## EDUCATION

*Master of Engineering, (Signal & System Track)*, Electrical Engineering  
Delft University of Technology, NL, Sep. 2023 - Quit in May  
GPA: **7.6/10** | Equivalent to **3.8/4.0**

*Bachelor of Engineering*, Electronic Science and Technology  
Xidian University, CN, Aug. 2019 - Jun. 2023  
GPA: **3.7/4.0** | Rank: **10%**

*Exchange Program*, Electrical Engineering  
Tohoku University, JP, Oct. 2022 - Mar. 2023  
GPA: **AA/AA**

*Summer School*, Robotics Training & Academic Writing  
University of Bristol, UK(Online), July - Aug. 2021

## INTEREST

Signal Processing, Machine Learning, Wireless Communication

## RESEARCH EXPERIENCE

- Conference paper publication as First author**  
doi:10.1109/ICSPS58776.2022.00026  
*Conference*: 14th International Conference of Signal Processing System(ICSPS)  
*Title*: SAR-GMTI Simulation based on DPCA
  - Employed an algorithm(DPCA) into Ground Moving Target Indication(GMTI).
  - Made a report on the conference.
- Patch antenna design(Undergraduate Project)** Oct. - Mar.2023  
Wireless Information Technology Lab, Tohoku University
  - Design a patch antenna array( $1 \times 2$ ) attached to a cable to ameliorate the performance of 2.4G Wifi in outdoor and indoor space.
  - Simulate the model through CST and conduct the experiment.
- Machine learning Projects** Sep. 2023 - Apr.2024
  - Projects related to Machine Learning and Signal Processing during my study and research period are created as the repository on my Github Homepage.
  - Including the machine learning classification, Bayesian Neural Network under TensorFlow, and Deep Learning projects(Group Normalization) co-operated with others.

## INTERN

- Radar Signal Processing Internship** Jul. 2024 - Now(Expect for 8 months)  
Research of Signal Processing(RSP), FusionRide
  - Analyze automotive radar signal data.
  - Develop Python script to summarize raw data.
  - Adapt signal processing algorithms like CFAR to solve problems(such as unexpected points, unstable targets) in point cloud map of radar.

**SCHOLARSHIP** Outstanding Student Scholarship, Xidian University, 2020 & 2021 & 2022

JASSO Scholarship, Japan Student Service Organizations, 2022

**COMPETITION AWARDS**

1. Meritorious Winner of Mathematical Contest in Modeling(MCM) (TOP 7%)  
Administered by Consortium for Mathematics and its Applications(COMAP)
2. First Prize of Competition of Mathematical Modeling  
Awarded by Xidian University

**BACHELOR'S COURSES**

Linear Algebra **95**  
C Program Design **98**  
Probability Theory and Mathematical Statistics **93**  
Digital Circuits and Logic Design **87**  
Electromagnetic Field & Electromagnetic Microwave **88**  
Radio Frequency Circuit **90**  
Signals and Systems **95**  
Equations of Mathematical Physics **99**  
Field Theory and Functions of Complex Variables **92**

**MASTER'S COURSES**

Machine Learning **7.7**  
Estimation & Detection **7.0**  
Radar I: From Principle to Application **7.5**  
System Engineering **8.6**