



# Keyi Wang

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Beijing, China

## EDUCATION BACKGROUND

**2019.09-2023.06** *Beijing University of Posts and Telecommunications* **Communication Engineering (Bachelor)**

**Core Courses:** Mathematical Analysis(97) | Digital Signal Processing(94) | Principle of Communications(93) | Modern Communication Technology(95) | Communication System Modeling and Simulation(100) | **GPA:** 3.8/4.0

**Integrated Score for Postgraduate Recommendation:** 92.42/104 | **Rank:** 10/541, Top 2%

**2023.09-Now** *Beihang University* **Information and Communication Engineering (Master)**

**Core Courses:** Theory of Modern Radar Systems(90) | Digital Image Processing(91) | Stochastic Process Theory(95) | Detection, Estimation and Modulation Theory(96) | **GPA:** 3.77/4.0

**Language Ability:** (English) CET4 594 | CET6 556 (Japanese) Preparing for JLPT N4

## RESEARCH EXPERIENCE AND PUBLICATIONS

**2020.09-2022.05** *Wireless Power Transmission Device Based on the Magnetic Coupling Technology* **Leader**

- We've built a wireless transmission device based on the principle of electromagnetic coupling, and the magnetic cores of FeSiAl material is connected in the transmitting and receiving coils to explore the influence of magnetic permeability on the magnetic field.
- One China national invention patent "a wireless power transmission device based on magnetic coupling technology and magnetic materials" has been applied and announced(**Co-author**).

**2023.03-2023.08** *Rule-based Intelligent Task Scheduling for Cutover in Optical Networks* **Research Intern**

- Working with China Telecom Research Institute, we focused on the implementation of intelligent task scheduling for cutover in optical networks by using rule-based methods including layered topological scheduling method based on greedy algorithm(LTPS-GA), maximal cliques(LTPS-GC) and particle swarm optimization algorithm(LTPS-PSO).
- One paper "Task Scheduling for Cutover in Optical Networks" has been submitted to Optics Express(JCR Q2, IF = 3.2) in January, 2025(**Co-author**).

**2024.03-Now** *Radar Target Detection Algorithms based on Prior Information* **Master Project**

- Aiming at the range spread target detection scenario for wideband radar, a detection method using envelope model prior is proposed, which has better detection performance than the traditional energy detector.
- One paper "A Robust Range Spread Target Detector for Wideband Radar Using Envelope Model Prior" has been accepted by IEEE CISP-BMEI 2024, which is indexed in EI Compendex(**First Author**). Another paper "Modeling method for statistical characteristics of dynamic RCS based on the mixture distribution" was accepted by the 18th National Conference on Signal and Intelligent Information Processing and Application in China(**First Author**).

## HONORS AND AWARDS

China National Scholarship(**Top 1%, Twice**)

Dec. 2021 & Dec. 2022

**Finalist** of Mathematical/Interdisciplinary Contest in Modeling(MCM/ICM, **Top 3%**)

May. 2022

Excellent graduate of Beijing University of Posts and Telecommunications

Jun. 2023

Excellent Student Cadre, First-class Scholarship for graduates(**Top 20%**)

Nov. 2024