

Ruizhe Wang

118010301@link.cuhk.edu.cn | (+86)180-6037-2998

2001 Longxiang Blvd, The Chinese University of Hong Kong, Shenzhen, China

EDUCATION

The Chinese University of Hong Kong, Shenzhen (CUHKSZ)

Bachelor of Engineering in Electronic Information Engineering

Sept. 2018 – Present

GPA: 3.87/4.00 (Cumulative), 3.84/4.00 (Major), Major Ranking: 3/44

Core Courses: Principles in Communication Systems (A), Wireless Communications (A-),
Selected Topics in Information Theory (A)

HONORS & AWARDS

Dean's List, School of Science and Engineering: 2019, 2020, 2021

Master's List, Shaw College: 2019, 2020

Academic Performance Scholarship: 2019 (class A), 2020 (class B)

Half Tuition Scholarship: 2018

RESEARCH EXPERIENCES

Streaming Code and Its Delay Profile | CUHKSZ | Research Assistant

July 2020 – June 2021

Advisor: Shenghao Yang, Assistant Professor at School of Science and Engineering, CUHKSZ

- Evaluated spectrum efficiency and throughput of different categories of streaming codes by Matlab.
- Designed a delay-optimized random linear codes to increase success rate under low delay constraint.
- Established streaming coding schemes for random linear codes and shift-XOR codes and compared their performance under binary erasure channel.

Distributed Backdoor Attack to Federated Learning | CUHKSZ

Jan. 2021 – May 2021

Advisor: Jianwei Huang, Presidential Chair Professor and Associate Dean of the School of Science and Engineering, CUHKSZ

- Reconstructed distributed backdoor attack in previous research.
- Investigated and verified the performance of existing attack patterns.
- Designed different schedules of distributed backdoor and evaluated the attack performance.

INTERNSHIP

Undergraduate Student Teaching Fellow | School of Science and Engineering | CUHKSZ | Shenzhen

Sept. 2019 – Present

- Prepared tutorial materials and held tutorial session in five courses (Calculus I & II, Linear Algebra, Ordinary Differential Equations, Digital Logic and Systems).
- Held office hour for students to ask questions or other consultations of the course.

Technology Research Engineer | Wireless Network Research Dept. | Huawei Technologies | Shanghai

June 2021 – Aug. 2021

- Developed simulation platform for forward erasure correction codes including Raptor codes, Reed-Solomon codes, RaptorQ codes and shift-XOR codes and evaluated them under different channels
- Designed sliding-window coding scheme and shift-added coding scheme to expand the possible code length of Reed-Solomon codes.
- Implemented complete shift-XOR library in C for further investigation.

Student Assistant | Admission Office | CUHKSZ | Shenzhen

Jan. 2019 – June 2019

- Gathered and organized information of admission information of other universities.
- Handled telephone counselling about undergraduate enrollment of students.

SKILLS

Programming Language: Matlab, Python, C/C++, Julia.

Software & Tools: LaTeX, Visual Studio Code.

English Certificates: TOEFL: 105 (Reading 29, Listening 27, Speaking 23, Writing 26)