**Xiaochan Xue**

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**EDUCATION**

**Bachelor’s Degree:**

**Jilin University (JLU) Changchun, China**

**Major: B.E. in** **Communication Engineering 09/2013-06/2017**

* Cumulative GPA: 80.36/100, Major GPA 82/100
* **Coursework**:

*Math & Stat*: Advanced Math, Prob. Theory & Stat, Complex Analysis & Integral Transformation

*EE & CS*: Digital Signal Processing, Random Signal Analysis, Computer Network, Information & Coding Theory, Algorithms & Data Structures, Digital Circuit & Logic Design, Analog Elect Circuits, Signals & System, High-Speed Circuit Signal Integrity Analysis & Design

**Master’s Degree:**

**Stevens Institute of Technology (SIT) Hoboken, United States**

**Major: MS of Electrical Engineering 01/2018-12/2019**

* GPA: 4.0
* **Coursework**:

*Math*: Analytical Methods in Electrical Engineering

*EE & CPE*: Applied Machine Learning, Special Problems in Electrical Engineering, Introduction to Control Theory, Computing Principles for Embedded Systems, Computer Architecture, Analytical Methods in Electrical Engineering, Linear System Theory, Python

**Doctoral Degree:**

**Stevens Institute of Technology (SIT) Hoboken, United States**

**Major: Computer Engineering start from 01/2020**

* **Research**:

*Topic*: Fast 3-D Indoor Imaging for NLOS Environments with WiFi Devices

*Description*: This project aims to realize fast 3-D indoor imaging using array of WiFi devices. Two sub-tasks will be investigated: 1) precise identification of direct path and multi-path signals respectively; 2) based on RF signal propagation properties over different physical media, estimate 3-D structure and geometry of indoor in non-line of sight (NLOS) environments.

**RESEARCH PROJECTS**

**Secrecy Performance of Hybrid Satellite-Terrestrial Relay Systems with Hardware Impairments**

**Master Degree Thesis, Advisor: Prof. Yulong Zou 06/2018-07/2018**

* As a group member to finish this thesis in Nanjing University of Posts and Telecommunications (NJUPT).
* This thesis has been published on IEEE.

**Encoding/Decoding Scheme & the Simulation of Concatenated Codes in Communication System**

**Bachelor Degree Thesis Project, Advisor: Prof. Dong Xiang 01/2017-06/2017**

* Used MATLAB simulation method to simulate and analyze the various channel coding schemes proposed in existing publications, including the concatenated code scheme used in different channels and several cascade codes
* Selected the appropriate channel coding and realized the reliability of the target communication without exceeding the complexity requirements of the system
* Studied the deep space communication, satellite communication, optical fiber communication and 3G mobile communication, and the concatenated code structure
* Simulation results showed that the concatenation code is better than the single code in order to obtain a larger coding gain and to maintain the system complexity

**Wireless Communication Integrated Experiment**

**Advisor: Prof. Yuhong Zhu 08/2016-10/2016**

* Learned the RF matching circuit design principle, Smith Chart Utility Tool and LineCal tool
* Used discrete capacitance inductance components, microstrip single branch stubs and microstrip double branch stub to design matching circuit
* Targeted to understand the different matching circuit applications and the matching principle and get familiar with the design process

**Signal Integrity Analysis and Design of High-Speed Circuit**

**College Student Research Training Project 08/2015-12/2015**

* Understood the high-speed circuit PCB design process, studied the high-speed signal PCB design theory, mastered circuit board layout and routing rules, multi-layer board power and ground segmentation method
* Learned how to draw I / O lines, how to draw the difference on the pair, how to place capacitors, resistors, and connect these original grounding power, etc.,

**Principles and Technology of Mobile Communication**

**Course Project 03/2015-06/2015**

* Studied the signaling interaction in GSM connection, the principle of GSM channel coding and decoding, and the application of FDD / TDMA in GSM system
* Mastered the measurement method of GSM mobile phone transmitting signal frequency spectrum, channel coding and decoding method on different GSM logical channels, time offset measurement method of uplink and downlink burst sequence

**LEADERSHIP/ACTIVITIES**

* **Vice President, School Student Union of Jilin University** **12/2013-06/2017**
* Organized college-wide extracurricular activities including “Singing Contest”, “Ping-Pang & Badminton Game”, “Basketball Game” and “The freshman welcome party”
* Took charge of the over 100 union members’ information collection, the daily routine of the Ministry of the regular meetings and the League Secretary, summarized all forms and documents; organized departmental activities and participated in co-educational activities

**HONORS/AWARDS**

* Third Class Scholarship, Jilin University **10/2016**
* Outstanding Student Leader, Jilin University **10/2016**
* Excellent Student Award in College, Jilin University **10/2015**

**LANGUAGES/SKILLS/HOBBIES**

**Languages**: Mandarin (Native), English (Proficiency)

**Computer Skills**: C (2yrs), C++ (2yrs), Matlab (2yrs), Java (1yr)

**Hobbies:** Tennis, Guzheng, Painting, Sketch, Piano, Guitar, Flute