

ZHANG QIAOSHENG

Department of Information Engineering
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EDUCATION

The Chinese University of Hong Kong, Hone Kong SAR, China September 2013 - present
Bachelor of Engineering,
Major: Information Engineering
Cumulative GPA: 3.974 / 4.000 (Rank first in department of Information Engineering)

Sun Yat-sen University, Guangzhou, China September 2011 - July 2013
Major: Electronic Information Science and Technology
Cumulative GPA: 3.900 / 4.000

AWARDS

The Chinese University of Hong Kong

- Best Project Awards of Undergraduate Summer Research Internship, 2014
- Dean's List of Faculty of Engineering, (2013 - 2014)
- College Head's List of United College (2013 - 2014)
- Q W Lee Scholarship of United College (2014 - 2015)

Sun Yat-sen University

- Academic Excellence Scholarship of SYSU Scholarship Fund (2012 - 2013)
- Academic Excellence Scholarship of SYSU Scholarship Fund (2011 - 2012)
- The Third Prize of the 9-th Electronic Design Competition, 2012

RESEARCH AND PROJECTS

Research Interests:

- Coding theory
- Network coding
- Wireless communication

On-going Research Topic:

- Network Error-Correcting Codes
Supervisor: Prof. Sidharth Jaggi, Prof. Mayank Bakshi
- Design and implementation of high performance decoders for next generation wireless systems
Supervisor: Prof. Liew Soung-Chang, Shakeel Salamat

Publications:

- **Q. Zhang**, S. Kadhe, M. Bakshi, S. Jaggi and A. Sprintson. Talking Reliably, Secretly, and Efficiently: A “complete” characterization. *IEEE Information Theory Workshop, 2015* (Under Review)

Presentations:

- Give a poster presentation on the East Asian School of Information Theory (EASIT) 2014, Hong Kong.

Projects:

- **Photo Ranking System**
 1. Extract key features from the training photos (“good” and “bad”) to train the ranking system.
 2. After training, the system can mark any input photos and judge whether they’re good or not.
- **People Counting System**
 1. Extract features from every frame of a video and construct a regression model.
 2. Predict the number of pedestrians in the video.
- **Course Enrollment System**
 1. Html, Css, Javascript are used to design the webpage (UI).
 2. Php and MySQL are used to manage the database.
- **Game - Balance ball**

Design a game based on assembly language and Intel 8088 microprocessor and 3-axis accelerometer.
- **Implementation of a Database Application (Stock Market)**
 1. Construct a database for Hong Kong’s stock market
 2. Manipulate and update real time data (MySQL) and provide ”searching” service for the users.
- **File Recovery in FAT32**
 1. Open the device file and search for deleted file
 2. Recover the file and specified by a filename provided by the user.
- **Bus Transfer System**
 1. Given the information of several hundreds of buses in Guangzhou.
 2. Design an algorithm such that when given a source and a destination, the path with minimal stops is printed.
- **File compression and decompression**
 1. Developed a software that can compression and decompression files.
 2. Use C++ and Huffman coding algorithm.
- **Electronic Intelligence Car**
 1. The design is based on single-chip microcomputer and C++.
 2. Infrared transducers are used to detect the correct direction.

EXTRACURRICULAR ACTIVITIES:

Academic activities:

- Take part in seminars and academic forums about information theory, communication and computer science.

Community activities:

- Member of curator team of Open Innovation Lab (OIL) CHUK
- Member of Student Union of School of Information Science and Technology SYSU
- Member of Career Development Center of School of Information Science and Technology SYSU