

About me

Enthusiastic, collaborative, optimistic, open and eager to learn.
Interested in writing software, dancing, designing, and traveling.
Live a life full of "Explore. Dream. Discover."

Research Interest

Machine Learning, Cyber Security, Computer Vision, High Performance Computing

Education

Beijing Jiaotong University (BJTU)	BEIJING, CHINA
M.S. degree in Electronic and Information Engineering (Class Rank 1/20)	2012 – expected March 2015
Jilin University (JLU)	JILIN, CHINA
B.S. degree in Telecommunication Engineering	2008 – 2012

Publications

- Wendi Weng, Houjin Chen, "Detecting Pit Defects on Rail Surface Using A Fast Detection Algorithm Based on Relative Gray," International Conference on Information Science and Electronic Technology, January 2015

Employment and Experience

China Mobile Group Design Institute	BEIJING, CHINA
Networking Software Engineer Intern	Sept'13 – present
<ul style="list-style-type: none">Involved in migrating codes of Monte Carlo based simulation platform from C to C++, which simulates the interference of multiple other communication systems to LTE system, including main modules such as modeling, interference calculation, encoding scheme selection, and comparative SNR output etc.Involved in tests of interference between TD-LTE and Radar system in 2,300-2,400 MHz; Designed and configured test network topology; Designed test framework and generated Python automation test scripts analyzing the interference under all different situations of configured systems.Involved in developing spectrum management web service that provides availability and information of inquired spectrum band; Designed the frond-end of spectrum inquiry input/output and interface to be integrated with other services under ASP.NET framework.Studied on empirical formula and algorithm to detect the interference type between different wireless systems and TD-LTE system, which significantly improves the detecting efficiency compared to manual investigation mostly used in current China Telecom industry; Involved in developing the software using C#, including main modules such as MySQL data input, detection and classification algorithm, and output report etc.	
Beijing Jiaotong University	BEIJING, CHINA
Research Assistant	Mar'13 – Aug'13
<ul style="list-style-type: none">Involved in developing and maintaining Coal Project Management System using C++; Designed and developed the HR management subsystem, including the connection to the database and main system.Involved in digital image processing research that uses algorithms of image segmentation and description to identify the targeted area, such as breast carcinoma lump and rail surface pits, etc.	

Course Projects

Human Face Detection System (Digital Image Processing)	2014
<ul style="list-style-type: none">Implemented a fast face detection algorithm based on image matching and gray value, which correctly identifies 80+% faces in typical photos despite the range of lighting conditions, angles and facial expressions.	
Josephus Permutation Counting-out Game (Data Structure and Algorithm)	2013
<ul style="list-style-type: none">Implemented JP problem with varied count stored in low complexity data structure using C.Implemented game GUI in LABVIEW.	
Student Grading Management System (Intermediate Programming Design)	2011
<ul style="list-style-type: none">Implemented SCRUD features using C; Stored and operated data in MySQL.	
Date and Time Display (Foundation and Application of Microcontroller)	2010
<ul style="list-style-type: none">Implemented date and time on 80C51 using Assembly.	

Extracurricular Activities

- **Main Organizer** - Graduate School Annual Performance Events (1,000+ ppl.) 2013, 2014
 - **Main Organizer** - IEEE student branch in Beijing Jiaotong University (70+ ppl.) 2013 – 2014
 - **Student Volunteer** - Graduate School Alumni Reunion; Performance in Geracomium 2013
 - **Main Organizer** - College Annual Performance Events (1,500+ ppl.) 2009, 2011
 - **Vice Captain** - Champion college volleyball team (among 20+ college teams) 2010, 2011
 - **Leading Actress** - 'Footprints' (First movie filmed by students in my college) 2010
 - **Student Leader** - D-D Change Club (100+ ppl.) 2009
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Honor and Awards

- Graduate Fellowship, BJTU 2012, 2013, 2014
 - Most Improved Student Award, BJTU 2014
 - Excellent Volunteer, BJTU 2013
 - Excellent Student Organizer, BJTU 2012, 2013
 - Excellent Student Organizer, JLU 2009, 2010
 - Undergraduate Fellowship, JLU 2008
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Technical Skills

- **Programming Languages:** C, C++, C#, Python, Shell, MATLAB, Assembly, Visual Basic, \LaTeX
- **Web Programming:** ASP.NET, HTML, CSS, Javascript, XML, JSON, SOAP, REST, Apache
- **Networking:** 2G/3G/LTE Networks, TCP/IP, HTTP
- **Operating Systems:** Windows, Mac OS, Unix, GNU/Linux
- **Softwares:** Visual Studio, MySQL, Git, Wireshark, VMware vSphere
- **Excellent Object-Oriented development skill**
- **Familiar with Agile/Scrum software development life cycle**