

## 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."

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## Research Interest

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

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## Education

Beijing Jiaotong University (BJTU)	BEIJING, CHINA
M.S. degree in Electronic and Information Engineering (Class Rank 1/20)	2012 – expected Mar '13 2015
Jilin University (JLU)	JILIN, CHINA
B.S. degree in Telecommunication Engineering	2008 – 2012

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## Publications

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

China Mobile Group Design Institute	BEIJING, CHINA
Networking Software Engineer Intern	Sept'14 – present
<ul style="list-style-type: none"><li>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.</li><li>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.</li><li>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.</li><li>Researched on empirical formula and algorithm to analyze and detect interference type between different wireless systems and TD-LTE system, which significantly improves the analyzing time and efficiency compared to manual analysis mostly used in current China Telecom industry; Involved in developing the software using C#, including main modules such as MySQL data input, classification algorithm, and output analysis etc.</li></ul>	
Beijing Jiaotong University	BEIJING, CHINA
Research Assistant	Mar'14 13 – Aug'14 13
<ul style="list-style-type: none"><li>Involved in developing and maintaining Coal Project Management System using C++.</li><li>Designed and developed the HR management subsystem, including the connection to the database and main system.</li></ul>	

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## Course Projects

Human Face Detection System (Digital Image Processing)	2014
<ul style="list-style-type: none"><li>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.</li></ul>	
Josephus Permutation Counting-out Game (Data Structure and Algorithm)	2013
<ul style="list-style-type: none"><li>Implemented JP problem with varied count stored in low complexity data structure using C.</li><li>Implemented game GUI in LABVIEW.</li></ul>	
Student Grading Management System (Intermediate Programming Design)	2011
<ul style="list-style-type: none"><li>Implemented SCRUD features using C; Stored and operated data in MySQL.</li></ul>	
Date and Time Display (Foundation and Application of Microcontroller)	2010
<ul style="list-style-type: none"><li>Implemented date and time on 80C51 using Assembly.</li></ul>	

## Extracurricular Activities

- **Main Organizer** - Graduate School Annual Performance Events (1,000+ ppl.) 2013, 2014
  - **Main Organizer** - IEEE student branch in Beijing Jiaotong University (20+ 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,  $\text{\LaTeX}$
- **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**