

YIMING PENG

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EDUCATION

University of Massachusetts Amherst, Amherst, MA Sept. 2013 - Dec. 2015(Expected)
M.S. in Computer Engineering
Overall GPA: Available upon request
Wuhan University of Technology, Wuhan, China Sept. 2009 - Jun. 2013
B.S. in Communication Engineering
Minor in Statistics
Overall GPA: Available upon request

WORK EXPERIENCE

5G Mobile Evolution Lab, *Independent Study Researcher*, Amherst, MA Dec. 2013 - May. 2014

- Resolved the issue of the communication difficulty in emergency situations without Internet using wireless technology.
- Developed an Android application that enables the emergency responders to establish an ad hoc network among mobile devices of the emergency system.

Wuhan Engineering Automation Co., Ltd., *Intern*, Wuhan, China Jun. 2012 - Sept. 2012

- Worked at the R & D team.

Wuhan University of Technology, *Teaching Assistant*, Wuhan, China Sept. 2011 - Jun. 2013

- Provided professional instruction to assist students in their academic courses' assignments and projects.

Wuhan University of Technology, *Research Assistant*, Wuhan, China Jul. 2011 - Aug. 2012

- Worked at Image Processing Group and Xilinx-WUT Joint Lab.

Luculent Software Co., Ltd., *Intern*, Nanjing, China Jun. 2011 - Aug. 2011

- Resolved the issue of the devices deploy for the monitoring on the combustible poisonous gas in urban subterranean room.

RESEARCH AND PROJECT EXPERIENCE

RunTracker, Independent Course Work, *Big Nerd Ranch* Summer 2015

- Developed an Android application that works with a devices GPS to record and display the users travels.
- Implemented local databases to store data about runs and their locations using SQLite.
- Utilized Loader API to keep database work on a background thread for a smooth user experience.
- Utilized Google Map API to display a map showing the track of the users run and markers of the start and end.

Operating System Project - System Software Design, *UMass Amherst* Spring 2015

- Assignment 1: Threads and Monitors, Assignment 2: Virtual Memory Manager, Assignment 3: Stack Smashing.

Natural Language Processing Project - NER Tagging for Twitter, *UMass Amherst* Fall 2014

- Constructed an NER(Name Entity Recognition) tagger for Twitter to recognize spans of text that correspond to a name in tokenized tweets.
- Utilized the CRFsuite software package and the IOB notation to do model training and label predicting on the corpus at Kaggle.com.

- Developed a feature extractor to extract the characteristics of words and an evaluator to calculate the correct ratio of predictions statistically using Python.

Network Security Project - Security in Emergency Situations, *UMass Amherst* Fall 2013

- Developed a set of mechanisms to protect the emergency response system, including access control, user authority allocation, communication encryption.
- Designed the user interface of the client app on Android platform.
- Implemented the functionality of the client app, including POIs(Points of Interest) post and display, Kerberos protocol in transmit process, MD5 Salt algorithm in login system.

Computer Network Project - Urban Search and Rescue, *UMass Amherst* Fall 2013

- Developed a disaster management system to assist emergency responders to search and rescue in emergency situations.

FPGA based Electric Vehicle Charging Pile - The 5th Annual National University Student Social Practice and Science Contest on Energy Saving & Emission Reduction, *Wuhan University of Technology* Nov. 2011 - May. 2012

- As the vice leader of the group, responsible for the program planning and the pre-function design and simulation.

Signal Transmission & Processing System based on FPGA, Xilinx-WUT Joint Lab Project, *Wuhan University of Technology* Sept. 2011 - Aug. 2012

- Implemented MSK modulation communication system based on Turbo codes using Simulink.

Video Capture & Image Processing System based on Animal Behavior Monitoring, Image Processing Group Project, *Wuhan University of Technology* Jul. 2011 - Dec. 2011

- Implemented face recognition and target recognition for multi-frame image using Matlab.
- Utilized Da Vinci System to do test.

EXTRACURRICULAR ACTIVITIES

W.E.B. Du Bois Library Learning Resource Center, *Chinese Tutor*, Amherst, MA Feb. 2015

- Provided professional instruction to assist students in learning Chinese language.

Outdoor Test of DIORAMMA, *Active Volunteer*, Amherst, MA Oct. 2013

- Participated the outdoor test of a project research sponsored by NIH(National Institutes of Health), titled "Mass Casualty Management System(DIORAMA-II)".

Guinness World Record for Fresh Fruit Salad, *Active Volunteer*, Amherst, MA Sept. 2013

- UMass Dining created the World's Largest Fresh Fruit Salad at 15,000 pounds and set a new record as recognized by Guinness World Records.
- Participated in World's Largest Fresh Fruit Salad cooking on Labor Day.

FiberHome Technologies Group Tech Talk, *Active Member*, Wuhan, China May. 2012

- Selected as student representative to Optics Valley Tech Talk and visited FiberHome Technologies Group.

Nandasoft Talent Centre Information Technology Outsourcing(ITO) Skills Training, *Active Member*, Nanjing, China Aug. 2011

- Actively took part in training lessons on ITO industry.

Summer Social Practice, *Active Member*, Nanjing, China

Jul. 2011

- Selected as student representative to a one-month Summer Social Practice, visited Ericsson Panda Communication Co., Ltd. and several start-ups.
- Actively took part in general meetings, tech talks and networking events.

Youth Website(Link: www.wutyouth.net), *Active Member*, Wuhan, China

Sept. 2009 - Mar. 2010

- Actively took part in general meetings and networking events.

RELEVANT COURSEWORK

University of Massachusetts Amherst

- ECE671 : Computer Networks
- ECE644 : Trustworthy Computing
- ECE665 : Algorithms
- CS683 : Artificial Intelligence
- CS585 : Introduction to Natural Language Processing
- ECE603 : Probability & Random Process
- ECE570 : System Software Design

Wuhan University of Technology, School of Information Engineering

- Information Theory & Coding
- Signal & System
- Communication Principle
- Electromagnetic Field & Electromagnetic Wave
- Analogous Electronic Technology
- Digital Signal Processing
- High-frequency Electronic Circuit

Wuhan University of Technology, School of Science

- Mathematical Analysis
- Higher Algebra and Geometry

TECHNICAL SKILLS AND QUALIFICATIONS

Computer Languages	Java, C/C++, Python; R, Matlab; HTML, CSS; XML
Software Develop	Eclipse(ADT, PyDev), Android Studio, GDB; Git; VirtualBox
Circuit Simulation	Proteus, Multisim, Protel, Keil
Operating System	Android, Ubuntu, Windows

HONORS AND CERTIFICATIONS

- 2011 Top Tier Fellowship Student of Wuhan University of Technology Oct. 2012
- 2011 Excellent Student Cadre of Wuhan University of Technology Oct. 2012
- Third Prize in the 11th "Innovation Cup" Student Tech Festival from WUT Dec. 2011
- Third Prize in Summer Social Practice from WUT Nov. 2011
- Third Prize in the 4th Electronic Design Contest from Electric & Electronic Innovation Center Jun. 2011
- Certification of C Programming from National Education Examinations Authority(NEEA) Mar. 2011
- Second Prize in the 9th Science Festival from WUT School of Science Apr. 2010