

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 pre- dicting on the corpus at Kaggle.com.
- Developed a feature extractor to extract the characteristics of words, including lexical, character affix, shape features, positional offset versions, and an evaluator to calculate the correct ratio of predictions 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

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| · 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 |