

# Yiming (Eamon) Peng

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## EDUCATION

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**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

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**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

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

- 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**

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**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](http://www.wutyouth.net)), *Active Member*, Wuhan, China**

Sept. 2009 - Mar. 2010

- Actively took part in general meetings and networking events.

## RELEVANT COURSEWORK

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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

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