

# YIMING PENG

279 Amherst Road, Apt 9 ◊ Sunderland, MA 01375  
(413) · 801 · 8072 ◊ eamonpeng91@gmail.com

## PROFILE

Motivated computer engineering student with broad skills and experiences in software development. Strong understanding in object-oriented programming and system design. Proficient in data structures and algorithms. Love to learn, fast to learn.

## EDUCATION

**University of Massachusetts, Amherst**, Amherst, MA      Sept. 2013 - Dec. 2015(Expected)  
M.S. in **Computer Engineering**      Overall GPA: Available upon request  
Relevant Courses: Algorithms, Computer Networks, System Software Design  
**Wuhan University of Technology**, Wuhan, China      Sept. 2009 - Jun. 2013  
B.S. in **Communication Engineering**      Overall GPA: Available upon request  
Relevant Courses: Signal and System, Information Theory and Coding, Mobile Communication

## EXPERTISE

**Languages**      Proficient in Java, Python, HTML  
Experienced with JavaScript, CSS, XML, C, C++  
**Tools**      Eclipse(ADT, PyDev), Android Studio, GitHub, VirtualBox, Matlab  
**Operating Systems**      Android, Linux(Ubuntu)

## RELATED EXPERIENCE

**RunTracker**      Apr. 2015 - Jun. 2015

- Developed an Android application that works with a device's GPS to record and display the user's 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 user's run and markers of the start and end.

**NER Tagging for Twitter**      Sept. 2014 - Dec. 2014  
*Course Project: CS 585 Natural Language Processing*      *UMass Amherst*

- Constructed an NER(Name Entity Recognition) tagger for Twitter to recognize spans of text that correspond to a name in tokenized tweets.
- Implemented a feature extractor in Python to extract the characteristics of words, including lexical, character affix, shape features, and positional offset versions.
- Utilized the **CRFsuite** software package and **the IOB notation** to train a model on the training corpus and make predictions on the development corpus.
- Designed a Python script to evaluate the predicted tags against the gold standard tags of the development corpus based on **F-score**.
- Optimized F-score from 0.036 to **0.475** for the previous development corpus, **0.362** for the unlabeled new tweets on Kaggle.com.

**Security in Emergency Situations**      Sept. 2013 - Dec. 2013  
*Course Project: ECE 644 Trustworthy Computing*      *UMass Amherst*

- 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.

**Data Acquisition for Monitors Deploy Planning**      Jun. 2011 - Aug. 2011  
*Internship*      *Luculent Software Co., Ltd., Nanjing, China*

- Resolved the issue of the devices deploy for the monitoring on the combustible poisonous gas in urban subterranean room.
- Implemented a web crawler in Java to collect the gas leak reports data of the last decade in Nanjing city.

## PERSONAL LINKS

**Personal Website**      <http://yimingpeng.com/>  
**GitHub**      <https://github.com/Eamon4213>