

# YIMING PENG

279 Amherst Road, Apt 9 ◊ Sunderland, MA 01375

(413) · 801 · 8072 ◊ pengyiming.umass@gmail.com ◊ <http://yimingpeng.com/>

## EDUCATION

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**University of Massachusetts, Amherst**, Amherst, MA      Sept. 2013 - Dec. 2015(Expected)  
M.S. in **Computer Engineering**      GPA: **3.2/4.0**

Relevant Courses: Algorithms, Computer Networks, System Software Design

**Wuhan University of Technology**, Wuhan, China      Sept. 2009 - Jun. 2013  
B.S. in **Communication Engineering**      GPA: **3.5/4.0**

Relevant Courses: Data Structure, Fundamentals of Computer Programming

## WORK EXPERIENCE

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**Luculent Software Co., Ltd.**      Jun. 2011 - Aug. 2011  
*Internship*      *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 Python to collect the gas leak reports data of the last decade in Nanjing city.

## PROJECT EXPERIENCE

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**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**, a statistic method to calculate the correct ratio of predictions.
- 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.

## EXPERTISE

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<b>Programming</b>	Java(Proficient), Python, HTML, CSS, XML, C/C++
<b>Software</b>	Eclipse(ADT, PyDev), Android Studio, GitHub, VirtualBox, Matlab
<b>Operating System</b>	Android, Linux(Ubuntu)