

# YIMING PENG

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

## PROFILE

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Motivated computer engineering student with broad skills, experiences and enthusiasm in software development. Proficient in data structures and algorithms. Familiar with mobile development. Love to learn, fast to learn.

## EDUCATION

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<b>University of Massachusetts, Amherst</b> , Amherst, MA	Sept. 2013 - Dec. 2015
M.S. in <b>Computer Engineering</b>	Overall GPA: Available upon request
Relevant Courses: Algorithms, Trustworthy Computing, System Software Design	
<b>Wuhan University of Technology</b> , Wuhan, China	Sept. 2009 - Jun. 2013
B.S. in <b>Communication Engineering</b>	Overall GPA: Available upon request
Relevant Courses: Signal and System, Information Theory and Coding, Data Structure	

## EXPERTISE

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<b>Languages</b>	Proficient in Java Experienced with Python, HTML, CSS, XML
<b>Tools</b>	Eclipse(ADT, PyDev), Android Studio, GitHub, VirtualBox, Matlab
<b>Operating Systems</b>	Android, Linux(Ubuntu)

## PROJECT EXPERIENCE

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<b>RunTracker</b>	Apr. 2015 - Jun. 2015
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- 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.

<b>NER Tagging for Twitter</b>	Sept. 2014 - Dec. 2014
<i>Course Project: CS 585 Natural Language Processing</i>	<i>UMass Amherst</i>

- 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.

<b>Security in Emergency Situations</b>	Sept. 2013 - Dec. 2013
<i>Course Project: ECE 644 Trustworthy Computing</i>	<i>UMass Amherst</i>

- 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.

<b>Data Acquisition for Monitors Deploy Planning</b>	Jun. 2011 - Aug. 2011
<i>Internship</i>	<i>Luculent Software Co., Ltd., Nanjing, China</i>

- 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

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<b>Personal Website</b>	<a href="http://yimingpeng.com/">http://yimingpeng.com/</a>
<b>GitHub</b>	<a href="https://github.com/Eamon4213">https://github.com/Eamon4213</a>