# YIMING PENG

279 Amherst Road, Apt 9  $\diamond$  Sunderland, MA 01375 (413)  $\cdot$  801  $\cdot$  8072  $\diamond$  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

M.S. in Computer Engineering

Overall GPA: Available upon request

Relevant Courses: Algorithms, Trustworthy Computing, 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, Data Structure

#### **EXPERTISE**

Languages Proficient in Java

Experienced with Python, HTML, CSS, XML

Tools Eclipse(ADT, PyDev), Android Studio, GitHub, VirtualBox, Matlab

Operating Systems Android, Linux(Ubuntu)

#### PROJECT 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.
- $\cdot$  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.
- $\cdot$  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 GitHub http://yimingpeng.com/

https://github.com/Eamon4213