# YIMING PENG

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### **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: Data Structure, Fundamentals of Computer Programming

#### WORK EXPERIENCE

#### Luculent Software Co., Ltd.

Jun. 2011 - Aug. 2011 Nanjing, China

Internship

- · 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.

### 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

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- · 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

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- $\cdot$  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**

Programming Java(Proficient), Python, HTML, CSS, XML

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

Operating System Android, Linux(Ubuntu)