Yiming Peng

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EDUCATION

University of Massachusetts, Amherst, Amherst, MA — Sept. 2013 - Feb. 2016
M.S. in Electrical and Computer Engineering — GPA: Available upon request
Wuhan University of Technology, Wuhan, China — Sept. 2009 - Jun. 2013
B.S. in Electrical and Computer Engineering — GPA: Available upon request
Top Tier Scholarship for Academic Achievement(Rank: 2/30)

RELEVANT COURSES

Algorithms, Data Structure, Web Development, Computer Networks, Operating System, Network Security, Natural Language Processing, Artificial Intelligence

EXPERTISE

Programming	Java(*Proficient*), Python, C++, C; JavaScript, JSON; PHP; XML; HTML, CSS
Tools	Eclipse(ADT, PyDev), IntelliJ IDEA; MySQL, SQLite; Git; VirtualBox; gdb; Matlab
Operating System	Android, Linux(Ubuntu), OS X, Windows

PROJECT EXPERIENCE

Android Project: RunTracker — Apr. 2015 - Jun. 2015
Link: https://github.com/Eamon4213/RunTracker

- Developed an Android application that works with a device's GPS to record and display the user's travels
- Built up local databases to store data of user's running activities and their locations using SQLite
- Utilized Google Map API to display a map showing the track of the user's running activities
- Provided a smooth user experience by using Loader API to keep database work on a background thread

Natural Language Processing Project: NER Tagging for Twitter — Sept. 2014 - Dec. 2014
Link: https://www.kaggle.com/eamonx/results

- Constructed a NER(Name Entity Recognition) tagger for Twitter to recognize spans of text that correspond to a name in tokenized tweets
- Utilized the CRFsuite software package and the IOB notation to do model training and label predicting on the corpus
- Developed a feature extractor in Python to extract the characteristics of words, like lexical, character affix, shape features, positional offset versions
- Optimized **F-score**(a statistics method to evaluate the accuracy of label predictions) from 0.036 to **0.475** for the initial labeled corpus, **0.362** for the unlabeled tweets on Kaggle.com

Android Project: Opportunistic Networking in Emergency Situations — Dec. 2013 - May. 2014
Worked as Android Developer at 5G Mobile Evolution Lab — *Amherst, MA*

- Developed an Android application that supports multi-hop peer-to-peer network connections without any intermediate access points or existing infrastructures
- Utilized Bluetooth API and MAC address to implement group text chatting among paired phones

Network Security Project: Security in Emergency Situations — Sept. 2013 - Dec. 2013
Link: https://github.com/Eamon4213/SecureRescue

- Designed a client-server security system for emergency situations that offers access control, user authority allocation, communication encryption
- Developed the client app in Android that supports account registration and login, allows users to post POIs(Points of Interest) to server. When server sends a message, the client app is able to receive it, display it and notify the user
- Implemented Kerberos Algorithm in the data communication and used MD5 Salt Encryption in the user account protection

Android Project: Newsstand — Jun. 2011 - Aug. 2011
Link: https://github.com/Eamon4213/Newsstand

- Developed an Android application that users can browse news items and visit their original web pages for details
- Built up a server and MySQL database to store data of the news title, description, and original web page URL on MAMP
- Implemented the connection and the data transmission between server and the client app by using PHP and JSON