Yiming Peng

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EDUCATION

University of Massachusetts, Amherst, Amherst, MA   Sept. 2013 - Dec. 2015
M.S. in Computer Engineering
Wuhan University of Technology, Wuhan, China   Sept. 2009 - Jun. 2013
B.S. in Communication Engineering
Top Tier Scholarship for Academic Achievement(Rank: 2/30)

RELEVANT COURSES

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

EXPERTISE

Programming	Java(*Proficient*), Python, C, C++; HTML, CSS; PHP, XML, JSON
Tools	Eclipse(ADT, PyDev); MAMP, PhpStorm; 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, including 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

· 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