Hanwen Wang

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OBJECTIVE

Software development summer internship in 2016

EDUCATION

Cornell University *Ithaca, NY* *Aug.2015 – Jan.2017(Expected)*

Master of Engineering in Electrical & Computer Engineering GPA: 3.92/4.0

Courses: Machine Learning, Introduction to Database Systems, Operating Systems, Computer Network Computer Vision, The Architecture of Large-Scale Information Systems, Investment&Portfolio Mgmt

Nankai University *Tianjing, China* *Sept.2011 – June.2015*

Bachelor of Engineering in Electrical & Computer Engineering GPA: 3.89/4.0

Awards: National Scholarship - 2011, Nankai University First - Class Scholarship - 2012, 2013, 2014

Courses: Introduction to Algorithms, Data Structures & Object-Oriented Programming

EXPERIENCE

Research Assistant at Cornell University*, Ithaca* *Aug.2015 – Present*

- Sourced agricultural data (e.g. soil, weather, and crop) in the United States, processed data based on geographic distribution and stored the data into database to help researchers study American agriculture.
- Parsed HTML and downloaded agricultural data files using python packages like lxml and BeautifulSoup.
- Processed data to get agricultural information in different states, counties, and farm boundaries using ArcGIS.
- Uploaded agricultural data set to SQL Server and designed database to make query of geographic data faster.

Web development internship at ChinaCache, *Beijing* *Apr.2015 – June.2015*

- Developed website to help set up NGINX Server, a proxy server to achieve load balancing, so that operation engineers can set up NGINX servers easily.
- Built the back-end of the website with Java frameworks like Spring MVC, Mybatis.
- Participated in designing MySQL database and user interface with JavaScript to set up NGINX server.

PROJECTS

SQL Query Interpreter *Sept.2015 – Dec.2015*

- Designed a SQL query interpreter which achieves basic functions like search, insert, update and join
- Parsed different clauses (e.g. select and where) in SQL queries using Java Jsqlparser package.
- Implemented sort-merge-join algorithm, which significantly improves the speed of the operation of join.

K-Means Clustering in Hadoop *Sept.2015 – Dec.2015*

- Configured Hadoop and HDFS on Linux Ubuntu.
- Implemented K-means clustering algorithm using Hadoop and MapReduce framework.
- Ran map-reduce jobs until convergence, and tested the program using JUNIT.

Projects in Machine Learning *Sept.2015 – Dec.2015*

- Predicted housing prices with community statistic using Neural Network algorithm.
- Implemented decision tree and then used it for bagging and boosting.
- Implemented code for ML algorithms such as SVM, KNN, perceptron and Naïve Bayes.

SKILLS & PLATFOTMS

Java, Python, MATLAB, MySQL, SQL Server, MongoDB, JavaScript, SpringMVC, Eclipse Github Hadoop, HDFS, Linux

INTERESTS

Programming, Piano, Football, Swimming, Basketball