Yuheng (Lyle) Li



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OBJECTIVE

Full-time Software Engineer

EDUCATION

M.S., Information Technology, Carnegie Mellon University, Pittsburgh, PA (GPA 3.95/4.0)	2015-2016
M.Eng., Data Mining, University of Chinese Academy of Sciences, China	2012-2015
B.S., Electronic Information Science and Technology, Jilin University, China (GPA 3.81/4.0)	2008-2012

TECHNICAL SKILLS

Language: Java, C#, Python, SQL, C/C++, JavaScript, HTML/CSS, JSP, Shell Scripting, R, MATLAB.

Tools: J2EE, .NET, Eclipse, Visual Studio, awk, AWS(EC2, EMR...), Azure, JDBC, Oracle11g, HBase, MongoDB,

MySQL, Hive, Redshift, Impala, Tomcat, Undertow, Servlet, SVN, Git, Maven, Weka, SPSS.

Knowledge: OOP/OOD, Algorithms, Software Architecture, Cloud Computing, Data Mining, Machine Learning, NLP, Digital&Analog Electronics, Technology Law.

INTERNSHIP

Assistant Software Engineer, Chinese Academy of Science(CAS), Beijing China

2014-2015

- Responsible for developing GeoVis, a GoogleEarth-like Information Analysis System;
- 1 year+ software development and scientific research with 20+ people team, 10,000+ line codes experiences.

PROJECTS

Twitter Analytics Web Service, Pittsburgh, PA

02/2016 - now

- Used Hadoop on Amazon EMR to conduct ETL on 300 millions (1T) of raw tweet messages;
- Tuned and optimized HBase and MySQL performance to serve complex read queries;
- Built a RESTful web application running on high performance non-blocking Undertow server as frontend;
- Achieved 10,000+ rps using load balancer and backend cluster under \$0.85/hour limited budgets.

Carnegie Financial Web Services for Mutual Fund Transaction, Pittsburgh, PA

01/2016 - 02/2016

- Developed a three-tier RESTful Web application with Java J2EE, JSP, Bootstrap, Tomcat and MySQL;
- Utilized Atomic Transactions to ensure the atomicity and consistency of fund transactions in DAO design;
- Implemented MVC design pattern for authentication control, role-based access control and fund operations;
- Analyzed and measured the performance and availability of the web service with Apache JMeter.

Social Networking Timeline with Heterogeneous Back-ends, Pittsburgh, PA

03/2016 - 04/2016

- Implemented RDS MySQL, MongoDB and HBase backend and undertow frontend running on AWS EC2, EMR;
- Optimized databased schema for metadata, graph model and JSON for realtime information retrieval;
- Achieved realtime collaborative filtering recommendation based on directed social graph.

Twitter based Entity Linking System, Beijing, China

02/2015 - 06/2015

- Developed an entity linking system with C#,WPF; dataset from Twitter APIs & Wikimedia; ETL by Mapreduce;
- Achieved Twitter mention disambiguation by automatically linking to corresponding Wikipedia articles;
- Proposed an improved Entity Linking algorithm, which models multiple features (user preferences, popularity etc.) of wiki entities and levitated the In-KB accuracy by 5% (compared with KAURI) to 90.17%.

GeoVis Information Analysis System, Beijing China

08/2014 - 05/2015

- Developed a software plugin with C#, WPF, Oracle 11g and SVN based on a GoogleEarth Like 3D globe;
- Customized 50+ data-driven usercontrols for data visualization, like track simulation, tri-state treeview etc.;
- Enhanced the data visualization effect by implementing an adaptive K-means to cluster spatial and temporal data from different altitude scales, leading to real-time data rearrangement and visualization.