

Xueyang(Sean) Hu

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EDUCATION

Brown University, Providence, RI Expected May 2017
M.S. in Computer Science GPA: **4.0**

Shanghai Jiao Tong University, Shanghai, China Top 5 in China June 2015
B.Eng. in Software Engineering Core GPA: **3.68** Ranked: **9/102**

EXPERIENCE

Morgan Stanley, Shanghai, China *Technology & Data Intern* June - Sept. 2014

- Updated a web application for demonstrating regression test results of a sales and trading system
- Improved database performance to be *10 times more* efficient by pre-computing join and aggregation queries for weekly updated database and storing the result into temporary table.
- Implemented new functions: online analyzing, result filtering, error suggestion based on historical analysis.

Differential Privacy in Industrial Database System Sept. 2014 - June 2015
Research Assistant *Shanghai Key Laboratory of Scalable Computing and Systems*, SJTU

- Evaluated the reliability and performance of existing differential privacy adapted data mining methods in large-scale industrial database system
- Implemented differential privacy adapted decision tree classifiers (included ID3, C4.5, CART, Random decision trees) by modifying Weka and scikit-learn source code. The paper was accepted by **VLDB**

Teach Assistant - Programming Language II - Data Structure Feb. - June 2015

- Managed the course website, held office hours. Designed and graded homeworks, labs. Explained assignments to 70+ students in class

SELECTED PROJECTS

Chord,Tapestry - Distributed Hash Table Protocol Spring 2016

- Implemented two structured P2P network, Chord and Tapestry with Go
- Implemented key-based routing mechanisms, consistent hashing with finger table(Chord), surrogate routing(Tapestry).
- Tested with self-wrote test program and test cases, covered 84% and 73% codes.

Virtual IP/TCP over UDP Fall 2015

- Designed and implemented a distributed local network system with Go
- Multi-threaded node supports IP packet routing and forwarding over unstable network via Routing Information Protocol (RIP).
- Implemented TCP state machine, reliable communication, flow control, transmission files up to 8Mb/s

Database Design and ETL(Extract, Transform and Load) Fall 2015

- Modeled data in E-R diagram and in SQL Data Define Language.
- Extracted, transformed and loaded raw airline, airport and flight data file into SQLite database via JDBC and SQL
- Wrote SQL queries and tested correctness and performance of the database design and implementation

Snowcast Internet Music Radio Station Fall 2015

- Designed and implemented Server/Client Network Protocol over POSIX socket APIs in C
- Multithreaded Server supports non-blocking IO, multiple music stations and client connections
- Defined server/client control commands for communication control

PUBLICATIONS

Xueyang Hu, Mingxuan Yuan, Jianguo Yao, Yu Deng, Lei Chen, Qiang Yang, Haibing Guan, and Jia Zeng. Differential privacy in telco big data platform. *Proceedings of the VLDB Endowment*, 8(12):1692-1703, 2015.

SKILLS

Languages: Go, Java, C/C++, Python, SQL

Courses: Network, Database, Computer Systems, Operating Systems, Data Structure, Algorithm

Platform Linux, Mac OS X, Windows