

Siang Gao

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EDUCATION

Carnegie Mellon University

Pittsburgh, PA

Master of Computational Data Science, School of Computer Science; GPA: 4.00/4.00

Aug 2018 – Dec 2019

- Selected Coursework: Cloud Computing, Distributed Systems, Storage Systems, Search Engines, Machine Learning

Peking University

Beijing, China

Bachelor of Science in Computer Science and Technology, School of EECS; GPA: 3.64/4.00

Sep 2014 – Jul 2018

EXPERIENCE

LinkedIn

Sunnyvale, CA

Software Engineer Intern

May 2019 – Aug 2019

- Improved Groups product and enabled group admins to separate group privacy and membership settings; implemented new logic in voyager api and multiproducts in Java, and added configurations to settings database
- Wrote a design document and held discussions on possible solutions with colleagues from different teams
- Resolved several bugs in Groups product by making changes in multiproducts with Java

Carnegie Mellon University

Pittsburgh, PA

Graduate Teaching Assistant

Jan 2019 – May 2019

- Maintained and improved course website written in Django: added token validation to frontend using iframe and Vue.js to ensure students learning materials sequentially, and kept track of website errors with Sentry
- Enhanced code review website by modifying the React component to collect scrolling behaviors made by reviewers for further analysis
- Held office hours to help students debug code and answer technical questions

Microsoft

Beijing, China

Software Engineer Intern

Jul 2017 – Oct 2017; May 2018 – Jul 2018

- Developed several websites: a K-12 education website with React, a single-page application for teaching traditional Chinese medicine with Vue.js, and a Django website for generating Q&A pairs for Bing's instant answers
- Implemented backend APIs for file transmission with Swagger Tools and Go, and ASP.NET website APIs for Aether job submission with C#
- Generated high-quality Q&A pairs for question answering by utilizing machine learning and XPath
- Performed text processing and big data analysis on Aether and Cosmos platform

SenseTime

Beijing, China

iOS Developer Intern

Jun 2016 – Sep 2016

- Developed iOS applications for face and gesture recognition using AVFoundation with Swift and Objective-C

PROJECTS

QryEval: Search engine for structured queries written in Java, supporting ranking algorithms include Unranked/Ranked Boolean, Indri, and BM25, with integration of pseudo relevance feedback, learning to rank, and diversification

Twitter Analytics Web Service: High-performance, fault-tolerant web service written in Java and Python, built on AWS and Lightsail within a limited budget, ranked first in class final live test, having HBase and MySQL as back end, whose schemas are highly optimized and data are loaded through MapReduce ETL on a large dataset

Two-phase Commit: Distributed system implementing two-phase commit protocol in Java with failure recovery

CloudFS: Cloud-backed local file system in C++ with file deduplication, snapshot operations and caching mechanism

PUBLICATIONS

- TongYang, Siang Gao, Zhouyi Sun, Yufei Wang, Yulong Shen, Xiaoming Li. Diamond Sketch: Accurate Per-flow Measurement for Big Streaming Data. To appear in TPDS 2019.
- Zhouyi Sun, Siang Gao, Bingqing Liu, Yufei Wang, Tong Yang, Bin Cui. Magic Cube Bloom Filter: Answering Membership Queries for Multiple Sets. To appear in Bigcomp 2019.

SKILLS

Languages: Proficient in C/C++, Python; Familiar with Java, JavaScript, Swift, SQL

Technologies: React, Vue.js, Django, AWS, GCP, L^AT_EX, Git, SVN, HTML, CSS, Aether