Zheng (Claire) Zhou

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EDUCATION

CORNELL UNIVERSITY, New York, NY — Aug 2021 - Expected May 2023
Cornell Tech M.S. i_n Information Systems, Computer Science Concentration — *Merit Scholarship*

BOSTON COLLEGE, Boston, MA — Aug 2018 - May 2021
B.A. in Computer Science, B.A. in Mathematics — *Cum Laude, GPA 3.75/4.0*

Coursework: Algorithms, Operating Systems, Distributed Systems, Large-Scale Data Processing, Swift/iOS development, Database Management, Applied Machine Learning, Mathematical Statistics

OBERLIN COLLEGE, Oberlin, OH — Aug 2017 - May 2018

WORK EXPERIENCES

XINWANG SHIXUN TECH Co., Ltd. — May 2021 - Aug 2021
Software Engineer Intern — *Nanjing, China*

- Constructed a Question-Answering system storing **200,000+** entities in **Neo4j** with a **Python** data spider and knowledge graph, earning a funding of **¥6,000** from China Telecom
- Optimized **SQL** queries to increase the accuracy of system's **20+** kinds of automatic responses by **13%**
- Managed database administration in **MongoDB**, application scaling with **Redis**, and **12 RESTful API**s for a urban data platform; Collaborated with 10 workers in a **agile** development; Integrated raster data **I/O** into the platform
- Reorganized RDD functions in **Scala** and reduced platform's calculation error rate by **7%**

ZHIHUITONGCHENG NETWORK TECH Co., Ltd. — Dec 2020 - Mar 2021
Software Engineer Intern — *Nanjing, China*

- Built a medical platform with **20+ CRUD** operations using **SpringBoot, Mybatis, Vue.js,** and **element-plus** to manage **200+** doctors' patients; Platform increased daily patients' inquires by **50+**; Reduced SQL query time by **35%**
- Boosted asynchronous HTTP requests with **Axios**; Deployed the platform on Tencent cloud with **Nginx**

PROJECTS

Distributed Chatroom Application

- Designed with **WebSocket**, **RPC**, & **GoLang** 10+ concurrent client channels to support two-way private/public messages; Provided web services with **Gin**

Hot Song Web App

- Created an app that sorts and ranks 10,000+ songs with **Javascript** (Front End), **Node.js**, and **Firebase** (Back End)
- Enabled users to send real-time song comments using LeanCloud SDKs; Maintained app in **Docker**; Assesed 100+ User Acceptance Testings and improved the mobile traffic by 10%

PUBLICATIONS

- Enabled S. Latif, **Z. Zhou**, Y. Kim, F. Beck, N.W. Kim, "Kori: Interactive Synthesis of Text and Charts in Data Documents," *IEEE Visualization Conference* (VIS), 2021.
- R. Yang, **Z. Zhou**, L. Tseng, M. Aloqaily and A. Boukerche, "Efficient and Robust Top-k Algorithms for Big Data IoT," *ICC 2020 - 2020 IEEE International Conference on Communications (ICC)*, 2020, pp.1-6.

TECHNICAL SKILLS

Programming - Java, Python (sklearn, numpy, pandas, keras), Javascript (React, Node.js), GoLang, C, Ruby, Swift
Toolkits & Frameworks - React, Spring, SpringBoot, AWS, Django, Docker, Redis, Kafka, TensorFlow, HTML, CSS
Data Analytics & Data Visualization - R, SQL, MATLAB, Tableau, Vega-Lite, D3.js

ACTIVITIES

Teaching Assistant - Facilitated 53 students build interactive websites; Hosted 3 weekly Javascript discussions
Research Assistant - Proved 10+ Top-K algorithms to be fault-tolerant in IoTs