

Fred (Qinmao) Zhang

5500 Wabash Avenue, CM 674, Terre Haute, IN 47803

(812) 241-1392 qinmao.zhang@rose-hulman.edu

Portfolio Website: <https://fredzqm.github.io>

GitHub: <https://github.com/fredzqm>

Education: ***B. S. in Computer Science, Software Engineering and Computer Engineering***

Rose-Hulman Institute of Technology, Terre Haute, IN

May 2018

Minors: Math, Data Science and Economics

Major GPA - 4.0/4.0

Related Courses: Hadoop Ecosystem, Introduction to Distributed Systems, Deep Learning, Formal Methods, Android Development, Operating Systems, Programming Language Concepts, Theory of Computation

Skills: Java, C++, JavaScript (TypeScript), Python, Ruby, Hadoop, Docker, MySQL, Firebase, Angular, React, Android, Spring Boot, MATLAB

Internship: **Groupon, Seattle, WA**

June 2017 - Aug 2017

Software Development Intern - Getaways Inventory Supply [MySQL, Redis, Java, Ruby]

- Designed new workflow to improve query performance and increase specificity of queries
- Restructured database to support finer grained data access to Getaways inventory products
- Implemented and tested new endpoints for use by Deal Service with full localization support
- Migrated data from external service with feature flag and emergency rollback plan

Projects: **Chess Grandmaster**

Aug 2013 - May 2017

Personal Project - [Java, Angular, Firebase]

<https://goo.gl/pGndFA>

- Designed *Chess Project* in Java that supports complete Chess rules and records
- Built the Angular front end, now hosted on GitHub Pages
- Implemented a Chess server that updates web app through Firebase

Path Finder

Nov 2016 - March 2017

Course Project - [Java, Hadoop, Hive, Pig, Oozie]

<https://goo.gl/EoKZnQ>

- Imported Chicago Map data from *OpenStreetMap* with [OSM2Hive](#)
- Designed an algorithm to compute shortest travel distance matrix at various zoom levels
- Implemented Pig UDF to deserialize and batch process map data

UML Generator

Nov 2016 - March 2017

Course Project - [Java, Graphviz]

<https://goo.gl/FNKUTv>

- Implemented *UML Generator*, a static code analyzer that builds UML diagrams of any Java project
- Implemented a [JVM Type Signature Parser](#), along with common pattern detectors
- Created a configuration framework for style customization and user-defined pattern detector

Jobee

June 2016 - Aug 2016

Personal Project - [Android, Java, Gradle, Firebase]

<https://goo.gl/RmLn9p>

- Designed and built *Jobee*, an Android app designed for recruiters to collect resumes
- Researched and integrated [zxing QR Code](#) and Firebase Cloud Messaging with the app

Honors: Tenth place in ACM ICPC Mid-Central Contest 2016

Eta Kappa Nu (HKN), IEEE National Honor Society

Alpha Lambda Delta (ALD), National Freshman Honor Society