Peiyuan Qi

+1 (213) 255-6802 | peiyuanqi@gmail.com | peiyuanqi.me

EDUCATION

University of Southern California   Los Angeles, CA
Master of Science in Computer Science   *Aug 2018 – May 2020*

Shanghai Jiao Tong University   Shanghai, China
University of Michigan – Shanghai Jiao Tong University Joint Institute (UM-SJTU JI)
Bachelor of Science in Electrical and Computer Engineering   *Sept 2014 – Aug 2018*

Selected Courses: Advanced Operating Systems; Analysis of Algorithms; Distributed Systems; Computer Networks; Programming Language Concepts; The Principles of Database System; Intro to Computer Organization; Structuring Machine Learning Projects.

PROFESSIONAL EXPERIENCE

Intel Asia-Pacific Research and Development Ltd.   Shanghai, China
Software Engineering Intern in Analytic Storage Team   *May 2018 – Aug 2018*
- Realized two HAS remote admin command line tool commands and improved HAS integration tests and documents;
- Improved RESTful API for Hadoop Authentication Service admin access;
- Implemented Hadoop Smart Storage Manage integration test scripts.

NVIDIA Semiconductor Technology (Shanghai) Co., Ltd.   Shanghai, China
Infrastructure Software Internship   *Aug 2017 – Apr 2018*
- Designed and developed a Perl Module to post more than 140,000 GPU simulation data per day to Elastic Search;
- Visualized posted data using Kibana and analyzed the trend of error data to support the debugging process;
- Devised and implemented a Python package for Elastic Search data retrieve and data manipulation;
- Realized an auto-detecting and reporting commands error function module of GPU simulation software;
- Applied doc2vec and WMD algorithms to perform the software Bug Triage tasks to improve team debugging efficiency.

SELECTED PROJECTS

StoneOsho To Do List iOS Application   Sept 2018 – Present
- Designed the backend architecture for user data management and provided database support for server side service.

International Programs Application and Management System   Apr 2018 – Aug 2018
- Developed the online system for UM-SJTU JI based on Laravel with around 1000 users;
- Implemented OAuth2 login, application submit and review, admin user management, automatic email notification functions;
- Designed the database patterns including many-to-many, one-to-many associations to support application needs;
- Realized the user interface of user/admin dashboard to achieve user friendly interactions.

Medicinatio.xyz   May 2018 – Jun 2018
- Developed an online Chinese question-and-answer social network website using WeCenter Framework individually;
- Improved WeCenter Framework based on Zend Framework to meet the project requirements and deployed on server.

TouchMore iOS and macOS Applications   Apr 2017 – May 2017
- Designed an iOS and macOS application to provide Numeric and shortcuts keypad with MultipeerConnectivity Framework.

SELECTED COURSE PROJECTS

JOS Kernel Development   Aug 2018 – Present
- Realized the memory initializing, exception and interrupt trapping on x86 machine an Exokernel named JOS in C individually.

Distributed Transaction Settlement System   Jun 2018 – Jul 2018
- Achieved a Distributed Transaction Settlement System based on Hadoop and Spark Streaming in a group of three;
- Implemented the backend storage in MongoDB and dealt incoming concurrent transactions with Kafka.

Java/C-ish Interpreter in Racket   Mar 2017 – May 2017
- Developed an interpreter to interpret a language supporting function, class, inheritance and polymorphism features in a group.

Network Application Layer Protocol Implementation   Apr 2017
- Designed an application layer protocol for server and clients to communicate and implemented with socket programming in C.

SKILLS

Java, Python, C++, C, Perl, PHP, Swift, Racket, Haskell, Bash, SQL, HTML/CSS, Go
Hadoop, Apache Kafka, Elastic Search, MongoDB, Spark Streaming, Zookeeper, Apache Kerby, Bootstrap, Laravel, MATLAB.

CAMPUS ACTIVITIES

Intelligent Internet of Things Research Center   Shanghai, China
Undergraduate Research Assistant   *Jun 2017 – Apr 2018*
- Doubled the concurrent database query speed for Acemap, an academic database;
- Set up and operated the MySQL replications of the academic search database.

UM-SJTU JI   Shanghai, China
Teaching Assistant   *Sept 2015 – Aug 2017*
- Teaching Assistant of Introduction to Logic Design, Honor Calculus IV, Calculus IV, Honor Calculus I and Tech Comm.