Peiyuan Qi

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EDUCATION

University of Southern California, Los Angeles, CA GPA 3.75/4.0
Master of Science in Computer Science *Aug 2018 – May 2020*

Shanghai Jiao Tong University, Shanghai, China GPA 3.6/4.0
University of Michigan – Shanghai Jiao Tong University Joint Institute (UM-SJTU JI)
Bachelor of Science in Electrical and Computer Engineering *Sept 2014 – Aug 2018*
2017 Spring Exchange Student at Case Western Reserve University EECS Department, Cleveland, OH GPA 4.0/4.0
Selected Courses: Advanced Operating Systems; Analysis of Algorithms; Foundations of Artificial Intelligence; Distributed Systems; Mobile Games; Computer Networks; Programming Language Concepts; The Principles of Database System.

PROFESSIONAL EXPERIENCE

Electronic Arts (EA) Inc. Redwood City, California, USA
Software Engineering Internship in EA Data Platform and Artificial Intelligence Team *May 2019 – Present*
- Migrated data collecting pipeline into Amazon Elastic Kubernetes Service;
- Modified data collecting pipeline to use AWS instance storage to Elastic Block Storage in Java;
- Implementing autoscaling mechanism for server cluster with graceful shutting down to achieve budget saving purpose.

Intel Asia-Pacific Research and Development Ltd. Shanghai, China
Software Engineering Intern in Analytic Storage Team *May 2018 – Aug 2018*
- Created two HAS for Apache Kerby command line tool in Java involving Adapter Pattern and accepted by the community;
- Improved RESTful API design for Hadoop Authentication Service admin access;
- Implemented Hadoop Smart Storage Manage integration automated test scripts using Python.

NVIDIA Semiconductor Technology (Shanghai) Co., Ltd. Shanghai, China
Infrastructure Software Internship *Aug 2017 – Apr 2018*
- Designed a Perl Object Oriented Module to post more than 140,000 GPU simulation data per day to Elastic Search;
- Devised and delivered a Python package for Elastic Search data retrieve and data manipulation with RESTful principles;
- Applied doc2vec and WMD algorithms to perform the software Bug Triage tasks to improve team debugging efficiency.

ACTIVITIES

HackTech 2019 Pasadena, CA
2019 Best Hack that Acts on the Physical World - Sponsored by Uber (Team Award) Mar 2019
- Developed a user health data monitor JS application for Fitbit;
- Enabled automatic Uber Requesting for Fitbit smart band user with Uber API;
- Designed a nearby medical personal help request system with Google map API.

Intelligent Decision Making (IDM) Lab Los Angeles, CA
Graduate Research Assistant *Jun 2019 – Present*
- Implemented multi-agent path finding solution with conflict-based search python class for hierarchical path plan.

SELECTED COURSE PROJECTS

Happy Contra, an iOS Mobile Game Jan 2019 – May 2019
- Designed and developed a mobile run-and-gun 2D platformer game with Unity game engine.

JOS Kernel Development in C Aug 2018 – Nov 2018
- Implemented the memory initializing, exception and interrupt trapping on x86 machine an Exokernel named JOS individually;
- Constructed the fork, process preemption, inter-process communication mechanism on JOS;
- Completed network driver for sending and receiving packets with emulated E1000 in QEMU.

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;
- Created a currency server maintained with Zookeeper updated by three concurrent threads;
- Implemented the backend storage in MongoDB and dealt incoming concurrent transactions with Kafka.

SELECTED PROJECTS

International Programs Application and Management System, A Full-Stack Website Project Apr 2018 – Aug 2018
- Developed the online system for UM-SJTU JI based on Laravel with around 1000 users with Object-Oriented Design Principles;
- Designed the database patterns including many-to-many, one-to-many associations to support application needs;
- Created the user interface of user/admin dashboard to achieve user friendly interactions with Ajax.

Medicinatio.xyz, A Full-Stack Website Development and iOS Development Project May 2018 – Jan 2019
- Developed an online Chinese question-and-answer social network website using WeCenter Framework individually;
- Implement an iOS application based on website infrastructure and published on Apple Testflight.

SKILLS

Java, C++, Python, C, Perl, Scheme, Docker, MySQL, Hadoop, Kafka, Spark Streaming, Zookeeper, AWS EKS, MongoDB.