**Zhouhang Shao**

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**Software Development Engineer**

**Specialized in: Elegant Solution Development, Requirements Gathering, and Team Collaborations**

A UCSD Computer Engineering master’s candidate specializing in software solution design seeking a position as a Software Development Engineer. Practical experience through academic projects in defining project requirements, developing scope and roadmaps, and creating and testing sophisticated solutions. Skilled at data structure design, end-to-end coding, technical analysis and problem solving, solution deployment, and the facilitation of technical collaborations leading to successful outcomes.

**Education**

**Master of Science, Computer Engineering** – University of California San Diego | La Jolla, CA (Expected graduation December 2018)

**Bachelor of Science, Computer Engineering** – University of California San Diego | La Jolla, CA

**Professional Experience**

**Software Engineer Intern, Data System Team Groupon |** Palo Alto, CA **|** June 2018 - September 2018

* Maintained company’s shared infrastructure and open source tech stacks and build out features in various projects, including Apache Kafka, Storm on Mesos, SLF4J, and Log4J2, for the world-wide e-commerce marketplace.
* Leveraged and enhanced open source Kafka partition reassignment tools improving usability and minimizing the data movement during cluster re-balancing.
* Assisted the team members to maintain and improve other existing infrastructure and tools inside the company.
* Developed a log de-duplication tool to detect and filter duplicated log messages enabling faster log file review.
* Studied and participated in business activities for the tech-based company and learned from industry leaders.

**Teaching Assistant and Tutor University of California San Diego** **|** La Jolla, CA **|** October 2017 - June 2018

* Assisted a tenured professor in the University’s Computer Science and Engineering department in course development and curriculum material preparation related to project and computer architecture.
* Presided over student-centric discussions and one-on-one lab-based meetings, addressed student questions and concerns, and clarified course material.
* Reviewed and evaluated weekly programming assignment and course examinations, including midterm and final exams.
* Tutored undergraduate college students on subjects, including Computer Science and Java Programming, and assisted in programming and debugging assignments during daily laboratory hours.

**Research Intern French National Research Institute for Computer Science & Automation** **|** Nice, France **|** Summer 2016

* Conducted experiment and measured the energy consumption of various CPU scheduling strategies on the Arm® big.LITTLE architecture, including the Energy Aware Scheduling (EAS) strategy proposed by the Linaro organization.
* Created test cases and performed multiple benchmarks on the Samsung Odroid XU3 and XU4 development board.
* Authored an internship report entitled “Analysis and Benchmarks with the Current CPU scheduling strategies and the Energy-aware-scheduling Approach on Arm® big.LITTLE System” and submitted for post on the institute’s website.

**Academic Projects**

**MicroMouse** Oct 2016 - May 2017

* Collaborated with a 5-member team to design the hardware and software components of a self-contained robot.
* Led the software development and implemented the maze-solving Flood Fill algorithm and PID control logic on the STM32 microcontroller using Arm® Mbed IoT Library.
* Entered the project in the IEEE All-California MicroMouse Competition (ACMC) and won the honor of the Best Design Award.
* **Core Skills:** Embedded Systems, System Design, Unit Testing, and Memory Management/Performance Optimization

**TickHelp** Mar 2016 - Jun 2016

* Developed an iOS app, in association with the project team, allowing users to chat through peer-to-peer Wi-Fi and Bluetooth low energy without the requirement of active internet connectivity.
* Deployed the real-time chat and nearby user detection features and administered back-end JSON data sessions on Firebase MBasS and used the GeoFire library to evaluate nearby users with GPS.
* Optimized the user interface delivering the robust user experience.
* Attended the competition in 2016 UCSD Mobile App Submit and won the Best of the Tech award.

**Technical Proficiencies**

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| Operating Systems | Linux, Mac OS and Windows |
| Development Tools | Git; JSON; SQL; Maven; UML; Kafka; SLF4J |
| Programming & Scripting Languages | Java; Python; C/C++; MATLAB; Swift; Ruby; Bash Scripting; System Verilog; ARM Assembly |
| Methodologies & Concepts | Agile/Scrum |