•Email: uofiszhou42@gmail.com

EDUCATION

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University of Illinois Urbana-Champaign

M.S in Computer Science (Dec 2019)

B.S in Computer Science & Statistics (May 2018) CS Tech GPA: 3.87 / 4.0 Overall GPA: 3.74 / 4.0 Dean's List (2015, 2016) Related Coursework: Operating System, Web Programming, Algorithms, Database Systems, Computer Networks, Computer Architecture, User Interface Design, Software Engineering, Software Testing

WORK EXPERIENCES

Software Engineer, Intern

Dropbox (Upcoming internship for Summer 2019)

May 2019 to Aug 2019

Software Engineer, Intern

Citrix Systems

June 2018 to Aug 2018

- Product: XenDesktop, a desktop virtualization software and a core product at Citrix Systems.
- Redesigned network file system driver syncing mechanism and implemented a block-level sync algorithm which **speeds up directory syncing by 70%**, greatly improving performance and user experience under high latency.
- Leveraged knowledge in C++, kernel-level multi-threaded programming and network protocols(TCP).

Software Engineer, Intern

Umiuni (Startup)

Dec 2018 to May 2019

- Umiuni is a website that provides on-campus information about housing and restaurants (https://www.umiuni.com/).
- Shipped a restaurant activity feature that allows restaurant owners to post promotional activities, while customers can participate by scanning a bar code in a restaurant. The feature directly leads to 5% of user growth for Umiuni.
- Created procedures and scripts for setting up front-end and back-end development environments using Docker, saving more than 20 hours of time for onboarding new hires in Umiuni. Formalize code production procedures to reduce site outages due to negligence.
- Leveraged knowledge in React, Axios, Bootstrap, Node JS, MongoDB, PM2, AWS, GIT and Docker.

Course Assistant

University of Illinois at Urbana-Champaign

Aug 2017 to Dec 2017

- Hosted office hours for Intro to Computer Science to help students with conceptual questions on Java, algorithms and debugging.
- Passionate about teaching problem solving skills. Capable of explaining complex concepts in simple terms.

SIDE PROJECTS

eduOS (Open Source Project, https://github.com/szhou42/osdey)

- Started an open source educational operating system written from scratch in C. Starred and forked by hundreds of students.
- Support virtual memory, multitasking, ext2 filesystem, network stack(IP/UDP/DHCP/ARP), and graphical user interface.
- Implemented a memory allocation algorithm with performance close to Linux's counterpart by implementing the Boundary Tags memory allocation algorithm and optimizing on memory fragmentation.
- Designed and implemented an original Graphical User Interface system that achieves **an average of 30 fps** with an optimized version of Painter's algorithm.
- Utilized C Programming, Vim, Computer Graphics algorithms, Operating System internals and wrote 15,000 lines of code.

SpentViz (Group Project, https://github.com/szhou42/Spentviz)

- SpentViz is a web-based dashboard that tracks your daily spending and provide insights and data visualizations to help you understand your spending patterns.
- Designed and implemented a dashboard that visualize spending with bar charts, pie charts with React, Axios and Bootstrap.
- Designed NoSql(MongoDB) database schemas and implemented Restful API end points for retrieving spending history data.
- Utilized React, Axios, Bootstrap, MongoDB, Node JS and GIT.

iTrust Hospital Management System (Group Project, github: https://github.com/szhou42/iTrust)

- Organize weekly meetings to conduct planning game, assign tasks and discuss progress made last week (keep everyone productive).
- Follow the Extreme Programming practices such as continuous integration, pair programming and refactoring.
- Follow the MVC design pattern to facilitate project development process.
- Implement new features such as scheduling doctor's appointment and assigning caregiver for patients with JSP, XHTML, JavaScript, and MySQL database.
- As a developer, I communicate with the Quality Assurance team to conduct White Box testing which achieves 90% code coverage.

ACTIVITIES & AWARDS

Kaggle Machine Learning Competition: Predict Future Sales (ranking top 1.5%, 11 / 750)

SKILLS

Java, Python, C/C++, JavaScript, HTML/CSS, System Programming, Docker, GIT, Node JS, React JS, MongoDB, MySQL, AWS