Jesse Zhang

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WORK **EXPERIENCE**

Amazon - Software Engineer

Sept. 2019 - Nov. 2022

Alexa Smart Energy

- Lead design & development on backend services for integrating external companies offering energy rebates on Amazon.com
- Established common API and data schemas for standarzied integration of external parties

Alexa Connect Kit

- Lead efforts on creating an automated firmware testing environment and developed tests that eventually caught 2 major bugs in production
- Collaborated with manufacturing teams and resolved critical launch blockers
- Designed and implemented critical path device lifecycle management for ACK devices supporting Matter framework

Amazon Halo

- Designed and implemented an online data collection mechanism to improve product accuracy based on customer feedback
- Implemented on-demand Bluetooth connectivity for the Halo app on iOS, resulting in hands-free reconnection of accessory
- Worked between domains to investigate and improved the battery life by $5{\sim}10\%$ for the Halo Band to address top post-launch customer concerns
- Proposed and developed a scalable approach to phone-accessory interaction for the Halo app to accommodate for future domain expansions
- Lead operational excellence initiatives for improving Tone responsiveness resulting in $\sim 20\%$ improvement in Tone's onboard success rates and other areas
- Advised leadership on critical Tone privacy concerns pre-launch
- Mentored intern to develop automated machine learning model test pipeline

Yahoo - Software Engineer I

Aug. 2017 - Sept. 2019

- Worked on test and build systems for Apache Traffic Server (ATS) using the Reusable Gold Testing System framework (AuTest) and BuildBot
- Created a set of automatic traffic replay tools for ATS to reproduce captured production traffic in an isolated environment for reliability testing

Apple - Software Engineering Intern

Summer 2016

SIDE **PROJECTS**

Mount & Blade II: Bannerlord Modding

• Developing and maintaining a collection of QoL gameplay mods in C# with over 7000 unique downloads on nexusmods.com

PUBLICATIONS Kim, M., Zhang, X., Milenkovic, O. (2016). MetaCRAM: an integrated pipeline for metagenomic taxonomy identification and compression. BMC Bioinformatics. 17:94.

EDUCATION Bachelor of Science, Computer Engineering University of Illinois at Urbana-Champaign

TECHNICAL Programming Languages: Swift, Python, C++, C, Java, C#

SKILLS