Xiaohan Liu

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Experience

Amazon Web Services, Inc.   Seattle, WA 98109
Software Development Engineer, Meeting Experience   10/2021 - Current
- As the tech lead of Amazon Meeting Panel Mobile Device Management (MDM), established acceptance criteria and tracked entire project process. Conducted consultations with first-party MDM team, completed compatibility and regression testing. Applied the corresponding refactor, crafted comprehensive documentation. Successfully onboarded over 3000 devices in 6 months, achieving a remarkable reduction in provision time from 30 minutes per device to 5 minutes per batch, enhanced operational efficiency.
- As the key engineer for the Hybrid Conference Management System (HCMS), actualized the meeting detail ad-hoc retrieval channel, improving the data consistency of the system. Designed and implemented the meeting dial channel, empowering in-room devices for meeting participation. Led the in-room interaction feature, expanding downstream client availability to entire Cisco in-room control system. Optimized client-side latency by asynchronous patterns and provisioned concurrency, resulting in 37% reduction at P99 level.
- Devised testing and metric system for the HCMS, accomplishing integration and real-time canary tests within the CI/CD pipeline. Delivered insightful metrics to the product team, enabling data-driven decision-making. Collaborated with downstream clients, ensuring the smooth deployment of system updates.
- As the key engineer for the Amazon Meeting Panel, proposed and implemented an error handling fragment on the Android app, enhancing the reliability of the user experience. Participated in the design and execution of provision workflow, automating provisioning processes. Conceived and developed provision security canary cases, ensuring the resilience and robustness of the provisioning process. In collaboration with a UX engineer, took the lead in the comprehensive redesign and successful launch of the new UI for the Amazon Meeting Panel, delivering notable improvements in both aesthetics and accessibility.

Amazon.com Services LLC   Seattle, WA 98109
Software Development Engineer, Identity Services   06/2021 - 10/2021
- Developed OAuth 2.0 authentication and authorization signals package for security measures. Established a channel to publish signals with AWS SNS topic. Implemented test cases to ensure system reliability. Imported and configured the package into the authentication and authorization application, collecting and reporting the signals of post-authentication and pre-authorization stages. Strengthened risk detection by forwarding signals to the risk detection platform, contributing to the identification of high-risk actions.

Beijing PipePlus Technology Co., Ltd.   Beijing, China 100089
Software Engineer Intern   07/2018 - 08/2018
- Applied the Matrikon OPC simulation server to generate randomized oilfield industrial data. Scripted tests for commercial database APIs, establishing a connection between the simulation server and the database to verify data accuracy during transportation. Encapsulated functionalities into a dependency package, achieved real-time reading, writing, and viewing of historical trends through APIs, optimized automation database management for oil and gas pipeline.

Skills

Programming Language
- Java, C/C++, Python, HTML/CSS/JavaScript, TypeScript, SQL, Kotlin, Bash

Framework & DevOps Tools
- AWS, Android, MDM, IoT, Dagger, NodeJS, React, Express, JQuery, JUnit4, JUnit5, Mockito

Education

Syracuse University   Syracuse, NY 13210
M.S. Computer Science   08/2019 - 05/2021
- Courses: NLP, Object Oriented Design, Principles of Operating Systems, Android Programming, Introduction to Database, Social Media & Data Mining, Design & Analysis of Algorithm

Tianjin University   Tianjin, China 300350
B.S. Applied Chemistry   09/2015 - 07/2019
- Coursework: Computation in Pd-Catalyzed Cross-Coupling Reaction

Technion - Israel Institute of Technology   Haifa, Israel 3200003
Exchange Student   08/2018 - 09/2018
- Course: Introduction to Machine Learning