Kalon Cheong

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Work Experience

Amazon Web Services [CloudFormation / IoT Data Services] Seattle, WA
Software Development Engineer II Jun 2017 | Present

- In the Launch Team for IoT Events. Led small team of developers to build two cloud service to execute actions on the customer's behalf, and push logs for customer's to view.
- Designed and implemented a streaming serverless application that transforms data and pushes to Elasticsearch Data Store.
- Designed and implemented CloudFormation Custom Resources to allow for automated infrastructure deployments.
- In the Launch Team of Batch Analytics, a feature in IoT Analytics which gives customers the ability to run container images to process their data from IoT devices. Led Operational Readiness and Canary Test Framework which monitors the health of the service.
- Tech Lead for AWS Resource Coverage Team. Instilling best practices in junior engineers for supporting resources in CloudFormation. And also was highly valued across the team as a knowledge well.
- Designed, implemented and released Rollback Triggers feature for CloudFormation Stack Updates. A user can attach a health alarm to their stack which would immediately stop the update and start rolling back.

Amazon Web Services [CloudFormation] Seattle, WA
Software Development Engineer I Jan 2015 | Jun 2017

- Designed, implemented, and released "Retain Resources" function in DeleteStack API. Providing a self-service tool for customers to unstuck themselves. Reduced the number of customer reachouts by ~18%.
- Top contributor in coverage and integration between Cloudformation and other AWS Services. Added support for 50+ new properties and resources. Including IoT and Application Autoscaling.
- Designed, implemented and released a intricate dependency graph merging algorithm to clean up a fuller set of resources. A unsolved problem since the inception of CloudFormation. Reducing the volume of customer reachouts by ~15% and decreasing the number of stack delete failures.
- Improved and maintained a large integration test suite which contained over 500 tests. Fixed bugs and increased the overall success rate by ~20%. This suite was able to perform regression test to ensure backward compatibility of resource support.

Amazon.com [Kindle - Silk Browser] Seattle, WA
Software Development Engineer Intern Jun 2014 | Aug 2014

- Built internal feature [Action Replay] for the Silk Browser, to help reproduce bugs and ultimately, speed up the debugging process for developers. It would record action events and replayed them on demand
- Utilized on multithreading, task scheduling to stimulate action replay. Primarily developed on Android SDK and Chromium. Java and C++ Development.
- Created a file storage and parsing system for storing and loading records.

Education

Stony Brook University Stony Brook, NY
B.Sc. Computer Science + Applied Mathematics & Statistics *GPA: 3.7* 2010 - 2014

Skills

Programming:	Java, Python, C/C++/C#, Bash
Technologies:	Amazon Web Services, NoSQL/SQL, Spring Framework, Apache Flink
Software Development:	Agile/Scrum/Sprint, Distributed Systems, REST/CRUD API, Cloud Computing

Projects

Convex Hull Simulator *Java* https://github.com/kacheo/ConvexHullApp
A graphical application which visually simulates convex hull algorithms