

# LEGENG LIU

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## EXPERIENCE

### **Amazon Web Services** - *Software Development Engineer II, Amazon EMR*

August 2019 - Present | New York City / Remote

- Worked on backend systems and security on Amazon EMR, a platform for processing big-data workloads using open source software.
- Delivered a key security feature which allows EMR customers to enforce fine-grained access control using AWS IAM on clusters with multiple users; launched the feature in a private beta with 12+ large enterprise customers, with plans to be publicly released in 2022.
- Built integration with CloudFormation for new EMR features, directly unblocking 5+ enterprise customers to adopt the new features; improved existing integrations and reduced EMR cluster start time on CloudFormation, a key performance metric, by 20%.
- Designed, built and optimized a scalable log analysis tool using Spark on EMR clusters with 100+ nodes, reducing the time to analyze logs from days to minutes and saving weeks of developer time.
- Served on a service-wide oncall rotation to maintain high availability of core services; coordinated with multiple engineers and managers to smoothly mitigate outages; executed deployment rollbacks and patches; analyzed outage impact from metrics and database queries; thoroughly investigated incidents and fixed root causes to prevent recurrence.

### **Amazon Web Services** - *Software Development Intern, AWS Glue*

June 2018 - August 2018 | Palo Alto, CA

- Built proof-of-concept AWS Lambda-based microservice to ingest production data, analyze customer traffic patterns, and run an optimized time-series model to forecast future customer usage.

### **Bio-Rad Laboratories** - *Software Development Intern*

June 2017 - August 2017 | Hercules, CA

- Implemented serverless microservices on AWS to ingest, process, and store customer data; created React web frontend to help life scientists visualize experiment workflows.

## EDUCATION

### **University of California, Berkeley**

B.A. Computer Science | Class of 2019

Relevant coursework: data structures, algorithms, compilers, security, databases, machine learning

## SKILLS

Technologies: AWS (IAM, CloudFormation, EMR, EC2, CloudWatch), Spark, Git

Programming Languages: Java, Bash, SQL, Python