Jiayi Li (Oliver)

San Diego, CA

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EDUCATION

University of California, San Diego   **San Diego, CA**
M.S. in Electrical and Computer Engineering, GPA: 3.52/4.0   *Sept'18-Apr'20*

University of Electronic Science and Technology of China   **Chengdu, China**
B.S. in Electronic and Information Engineering, GPA: 3.91/4.0(Top 5)   *Sept'14-Aug'18*

SKILLS

- **Programming Languages:** Java, JavaScript(ES6), Python, C
- **Front End:** React, Redux, HTML, CSS, jQuery, XML/JSON, RESTful API, GraphQL
- **Back End:** GraphQL, Google Guice, Node.JS, MongoDB, RPC, Maven
- **Cloud/OS:** AWS (Lambda, DynamoDB, Redshift, Cloudformation, IAM, VPC), Docker, Kubernetes, Shell Script

WORK EXPERIENCE

SDE intern - Amazon Web Service   *June-Sept'19*
[React, Redux-Saga, RESTful API, Mapbox GL, AWS components(Lambda, DynamoDB, Redshift)]
- Added new feature to internal tool, which visualizes internal data on the map.
- Created UI Component using react-redux (for state control) and redux-saga (for async actions).
- Designed unified query API for multiple-endpoints(SQL and No-SQL) with GraphQL.
- Implemented AWS Lambda to fetch and transform backend data.
- Enabled AWS resource cross-region access and permission control by configuring Virtual Private Cloud (VPC) and Identity and Access Management (IAM).
- Used Agile and Scrum framework. Involved in Sprint Planning, Stand-up, and Retro meetings.

Android SDE Intern - TD Tech   *June-Aug'18*
[Apache Commons Net, Android SDK (API level 24)]
- Developed an Android bug report App to capture, compress and upload logs to server.
- Implemented FTP file upload feature with Apache Commons Net.
- Collected and analyzed local error logs with Regex parsing and compressed logs for uploading efficiency.
- Customized a State Progress Bar and a Circular Progress Bar to promote UI consistency.
- Created an automation shell script for Android development (getting the signature and installing App).

PROJECTS

HDFS-like Distributed File Storage System   *Oct-Dec'18*
- Created a distributed cloud-based file storage system for client and server with Remote Procedure Call (RPC).
- Implemented CRUD APIs with synchronization mechanism.
- Applied RAFT protocol for fault tolerance and replication including leader election and 2-phase commit.
- Deployed distributed system across regions and tested with hash placement and nearest-to-client approach

UNIX-like Operating System Design   *Jan-Apr'19*
- Built OS kernel modules which support threads and processes management.
- Implemented different schedule mechanisms including preemptive and non-preemptive scheduling policies.
- Realized processes synchronization using Semaphore in shared-memory to avoid deadlocks.