Marc Yang

Cell: 206-498-8567 • m.y.yang001@gmail.com

SUMMARY

Experienced software engineer mostly focused on large-scale distributed backend and infrastructure

EDUCATION

McGill University   2014 – Dec 2017
Bachelor of Science, Major in Computer Science
Activities and Societies: McGill Robotics Club Mars Rover Team, McHacks 2016, HackHarvard 2016, ConuHacks II 2017

COMPUTER SKILLS AND LANGUAGES

- Preference: Java, Python,
- Working Proficiency: F#, C# (.Net Framework), C++, C, Ruby, JavaScript, Perl, Matlab, HTML, CSS, CGI, Git, Bash
- Frameworks & Technologies: Java Spring Boot, Grails, Akka, React-Redux, MEAN Stack, AWS
- Familiarity with MySQL, Oracle DB and SQL Queries, MongoDB, Redis, Couchbase, Apache: Ant, Maven, Kafka, Flink

WORK EXPERIENCE

Pinterest Inc   April 2022 – Present
Software Engineer, Ads Budgeting Infrastructure
- Designed and built an unified budgeting service that detects over budget signal for different types of campaigns and experiments
- Reduced AWS infrastructure cost by more than 60% and removed all the core logic technical debt with the new unified budget service
- Optimized performance and scalability of a service by reducing its P99 latency from 30 minutes to 500 milliseconds via a redesign
- Migrated some services from Kafka Streams to Flink
- Delivered the backend service features to support new algorithm calculation for ads such as flexible daily budget

Amazon Web Services (AWS)   October 2019 – March 2022
Software Development Engineer, AWS Backup, AWS SNS
- Led the design and development of continuous backup and restore solutions for NoSQL and relational database storage
- Led the development of a service for AWS Backup Audit Manager using DynamoDB, AWS Config, Lambda and Step-function
- Led a team of 3 engineers to deliver end-to-end CloudFormation supports for AWS Backup Audit Manager in record breaking time
- Built a large-scale tier-1 messaging service that handles high volume traffic (10M+ TPS) in a distributed environment
- Led and developed end-to-end service features such as message fallback mechanism and message delivery caching mechanism
- Led and built the SNS CloudFormation platform, migrated to open source and built all the all the internal CI/CD infrastructures
- Mentor and onboard new team members successfully, which contributed to multiple project launches in the team

Klipfolio, (Big data startup)   August 2018 – August 2019
Software Developer, Data Platform
- Developed platform that transforms large-scale data into common models in order to generate charts, tables and maps
- Developed features from back-end to front-end mainly using React-Redux, GraphQL, Redis, MySQL, Sprint Boot, Elasticsearch and Akka
- Worked in Docker environment and deployed and maintained micro services in AWS. Working in a dynamic startup environment

IBM   May 2017 – July 2018
Software Developer
- Worked on optimizing the IBM XL C++ compiler on IBM mainframes and implemented various optimization techniques
- Built customer facing features to enhance IBM data analytics product

Genetec Inc   September 2016 – December 2016
Software Developer
- Participated in the on-going development of a SIP communication platform using the .Net Framework
- Developed features and bug fixes using C# and F#. Integrated with SQL Server and multiple intercom hardware.

TrafficJunky   May 2016 – August 2016
Software Developer
- Developed in Python a fault-tolerant system to automate the delivery of ad log files from local servers to AWS
- Created an application using Node.js Ruby, Redis, Fluentd, Kafka and MySQL

Nuance Communications   May 2015 – August 2015
Software Developer in Test
- Developed automation tests and test servers using Python, JSON, XML, Node.js and Selenium
- Improved, designed and organized test infrastructure for future maintenance

PROJECTS

Traveler Mobile App (ConuHacks II 2017), Web-app for farm management (HackHarvard 2016)