David Zhang

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Skills

Languages	**Python**, **Swift**, **Java**, Scala, C++, Objective-C, Javascript, SQL
Frameworks	Spark, Airflow, Google Cloud, Cocoa Touch, Android, React Native
Databases	MySQL, PostgreSQL, MariaDB, Cassandra
Tools	Git, Xcode, Intellij, Docker, AWS, Vagrant, Android Studio

Education

University of Waterloo   Sep 2013 - Apr 2018
Candidate for Bachelor of Software Engineering

Work Experience

Data Engineering Intern Snapchat   Sep 2017 - Dec 2017
Venice, California

- Implemented sampling tools for aggregation engine running on Spark cluster
- Added union support for aggregation of multiple data sources
- Built Airflow DAG to generate reporting for A/B tier 1 business metrics
- Benchmarked aggregation performance for wide vs. long intermediate tables
- Set up testing and deployment process for internal Airflow fork
- Performed migration to upgrade internal production Airflow to latest version
- Incorporated new features into Airflow UI to improve developer productivity

Mobile Engineering Intern Snapchat   Jan 2017 - Apr 2017
Venice, California

- Implemented end-to-end notification settings for Snap Ads Portal
- Built and improved client-side ad search through extensive caching
- Added instrumentation to track network latency and daily active users
- Migrated UI in Snap Ads Portal to the latest look and feel
- Improved memory and CPU usage for both iOS and Android mobile clients

iOS Engineering Intern FiveStars   May 2016 - Aug 2016
San Francisco, California

- Delivered revamped Explore View using Auto-Layout and RestKit
- Increased active users by 15% through Branch deep linking
- Integrated Twilio to support merchant-consumer conversations
- Designed caching manager to reduce network overhead by 50%
- Identified hotspots and improved launch performance by 40%
- Implemented Universal Promotions at FiveStars Hackathon
- Presented technical talks on multi-peer framework in iOS

Work Experience

Fullstack Engineering Intern OANDA   Sep 2015 - Dec 2015
Toronto, Ontario

- Developed asynchronous flow to reduce registration time by 20%
- Reduced onboarding time by 80% through Vagrant setup
- Built custom web dashboards to monitor sprint pipeline quality
- Designed new mobile registration portal at OANDA Hackathon

Python Engineering Intern Eventmobi   Jan 2015 - Apr 2015
Toronto, Ontario

- Built service and endpoints for Flask-based RESTful API
- Implemented prototype RabbitMQ-based asynchronous web API
- Retired legacy content manager and migrated critical business logic
- Resolved full-stack issues in web and mobile clients

SIEM Engineering Intern Trustwave   May 2014 - Aug 2014
Cambridge, Ontario

- Developed Kafka-based distributed messaging tool for SIEM NG
- Researched migration feasibility from MySQL to MariaDB/Cassandra
- Benchmarked read/write performance of MariaDB storage engines
- Implemented automated program to analyze JIRA sprint performance

Projects

Spycodes   Aug 2016 - Present
itunes.apple.com/us/app/spycodes/id1141711201

- Implemented peer-to-peer multiplayer word association game
- Continuous, iterative development to support new features
- 5K+ global downloads

Off The Grid   Nov 2015
devpost.com/software/off-the-grid-lhgj8q   **Finalist**

- Built offline, real-time canvas collaboration iOS multi-peer app
- Top 6 finalist at Hack Western 2015, an MLH-sponsored hackathon

Scarecrow   Nov 2015
instructables.com/id/Scarecrow-Intel-IOT/   **2nd Place**

- IOT security system integrating Intel Edison and Touch-ID based iOS app
- Powered by Node JS and Python servers
- 2nd place at Intel IOT Roadshow 2015