

AKASH SINGH

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🏠 Newark, CA, 94560

EXPERIENCE

Google, Mountain View, CA **Software Engineer III** Oct 2020 – Present

Work Area/Skills: C++, Java, Cross Platform Development, Highly Scalable Distributed Systems, CI/CD

- Spearheaded development efforts to achieve seamless functional parity across server and on-device platforms
- Modernized the Cloud SSML API as the TL, delivering enhanced synthesis and increased customer satisfaction
- Mentored interns, guiding them to bring the Cloud SSML API to parity with the top competitor offerings
- Designed and implemented a highly efficient and portable SSML processor, elevating on-device capabilities
- Enhanced the timepointing module to achieve a remarkable ~30% efficiency improvement affecting 15k+ QPS
- Implemented high-performance modules within the serving stack, that handles a substantial load of 100k+ QPS

Google, Mountain View, CA **Software Engineer II** Jun 2018 – Oct 2020

Work Area/Skills: C++, Flume, CI/CD, Monitoring & Alerting Dashboards

- Engineered a sophisticated system to dynamically trigger conditional verbalization, rewrites and voice selection
- Built code generator for nested inputs, boosting unicode normalization performance by ~25% for 100k+ QPS
- Played a key role in the development and implementation of a cutting-edge Text To Speech input API
- Successfully led the migration of multiple clients' systems across the Google codebase to adopt the new API
- Built realtime visualization and alerting dashboard system for the Text To Speech API usage and failures

Google, Mountain View, CA **Software Engineer** Jul 2017 – Jun 2018

Work Area/Skills: C++, Java, Flume

- Developed Flume jobs to train ML models, leveraging regional preferences to curate video seeded playlists
- Conducted rigorous A/B testing on multiple ML models for video seeded playlists to ensure successful launches

Bloomberg LP, New York, NY **Software Engineer Intern** May 2017 – Jul 2017

Work Area/Skills: C++, JavaScript, Data Visualization

- Revamped data visualization charts to provide real-time updates, empowering users with dynamic insights
- Engineered a smart search mechanism enabling translation of human-language text input into SOLR queries

Nvidia, Santa Clara, CA **Software Intern** May 2016 – Jan 2017

Work Area/Skills: Python, AWS, Scalable Distributed Systems, Kafka, Elasticsearch, Logstash, Kibana

- Architected a robust end-to-end data aggregation pipeline utilizing Kafka, Logstash, Elasticsearch and Kibana
- Leveraged AWS AMI to efficiently scale the ELK dashboarding infrastructure to handle large-scale data

ACI Worldwide, Pune, India **Associate Software Engineer** Jul 2013 – Aug 2015

Work Area/Skills: Java, Python, Jira, Payment Processing

- Headed Issue Management team, successfully resolving issues, leading to substantial cost savings for clients
- Implemented high availability solutions in Java, enabling smooth and secure Electronics Funds Transfers

EDUCATION

Northeastern University, Boston May 2017

Master of Science in Computer Science

GPA: 3.75

University of Pune, Pune, India May 2013

Bachelor of Engineering in Information Technology

GPA: 3.83

SKILLS

Programming Languages: C++, Java, Python, JavaScript

Frameworks: Android SDK, MapReduce, Spark, AngularJS

AWS: EC2, S3, VPC, ELB, Direct Connect, Route 53, AMI, IAM, CloudWatch

Databases: MongoDB, Oracle, SQL Server, DB2, MySQL, PostgreSQL, Cassandra

Others: SSML, Git, Node.js, Elasticsearch, Logstash, Kibana, Kafka, Redis, SOLR, JIRA