Ganesh Krishnan Sivaram

• Riverside, CA 92507 • (951) 563-7420 • ganeshkrishnans94@gmail.com • https://www.linkedin.com/in/ganeshkrishnans/

EDUCATION

UNIVERSITY OF CALIFORNIA,RIVERSIDE **September 2019 - March 2021**

- Master of Science Computer Science GPA: 3.9

SASTRA UNIVERSITY, INDIA **June 2012 - May 2016**

- Bachelor of Technology Computer Science GPA: 3.53

WORK EXPERIENCE

Software Engineer **Samsung R&D Institute India** **June 2016 - August 2019**

SonarQube - Code Quality Platform

- Developed a Java plugin to integrate proprietary static analyzer tool in SonarQube an open source software for continuous inspection of code quality, to detect bugs and vulnerabilities, which reduced the development time of projects by 25%.
- Developed REST APIs and React.js dashboards to represent code quality metrics for SonarQube v6.7 that reduced time taken for reviews and audits by the team heads from 1 hour to less than 20 minutes.
- Collaborated with multiple stakeholder teams across R&D centers around the world to develop, release, and maintain plugins covering over 450+ projects.

SamsungHealth CI Framework

- Empowered product managers to make better decision by developing a full stack application to monitor the continuous integration system of SamsungHealth app, leading to reduced application release cycle from 3 months to 1 month.
- Developed python scripts to automate data and report collection from continuous integration pipelines and stored it in MySQL database for efficiently store the data for accessibly.

PROJECTS

Search Engine for football news **Winter 20**

- Scrapped news articles related to English football from the web. Created indexes and implemented BM25 and uni-gram ranking models on news documents using Apache Lucene and Hadoop MapReduce. Showcased Lucene performed 5x better than MapReduce.
- Developed back-end REST API using java,spring boot to query relevant articles from MongoDB based on indexes created by Lucene and MapReduce. Developed web UI using React.js to query and view search results.

Analysis of Wildfires using satellite data **Fall 19**

- Developed scripts to download MODIS satellite data of wildfire,vegetation and temperature of California for the year 2018 on Hadoop Distributed File System. Processed the raw satellite data using Java, Spark to produce concise datasets of averaged daily values.
- Assessed the impact of temperature and vegetation on wildfires by calculating the Pearson's correlation coefficient using Numpy and visualized the analysis using ArcGIS.

Fault-Tolerant Key-Value Store **Spring 20**

- Implemented a distributed Key-Value store supporting CRUD (create,read,update,delete) operations and load balancing using consistent hashing ring to hash both servers and keys in C++. Replicated each key three times in the ring to achieve fault-tolerance up to two failures.
- Implemented Gossip style membership protocols to detect node failures.

Movie Box Office Prediction **Fall 19**

- Developed a financial model to forecast performance of a movie at the box-office before its theatrical release by applying Support Vector Machine (SVM) in python.

SKILLS

- C; C++;Java; Python; JavaScript; React.js; SQL; HTML; CSS; AJAX; Redux; HDFS; Hadoop MapReduce; Apache Spark; AWS; Lucene; Linux; JIRA; Perforce; Git; Object Oriented Programming; Agile software development; Scrum;