

# Shivram Krishnamurthy

+1(669)295-8245 • [skrishnamurthy2@scu.edu](mailto:skrishnamurthy2@scu.edu) • [LinkedIn](#) • [GitHub](#) • Santa Clara, CA US 95050

## EDUCATION

**Master of Science in Computer Science and Engineering, GPA 3.61** (Expected) June 2023

Santa Clara University, Santa Clara, CA

*Advanced Operating Systems, Design and Analysis of Algorithms, Adv Database Systems, Machine Learning, Design Patterns*

**Bachelor of Technology in Computer Science, GPA 3.10**

April 2017

Amrita University, Coimbatore, India

*Data Structure & Algorithms, Object Oriented Analysis & Design, Web Programming*

## WORK EXPERIENCE

**e2Open – Software Engineer Intern – Santa Clara, California – JAVA | SPRING | GROOVY | REST API** June 2022 to December 2022

- Part of the Research & Development engineering team working on core Supply Chain Management Product
- Modified a search functionality for transport orders by leveraging **Elasticsearch** improving retrieval speed by 44%
- Designed and implemented a fix for a concurrency issue using synchronizations locks in **Java** resolving data inconsistency in microservice
- Added multiple filters and paginated a REST API endpoint to list the Transport Orders utilizing **Spring Framework** speeding up Supply Chain Process by 30%
- Increased data fetching performance of **REST API** by 47% by deploying Redis cache for storing frequently received queries

**Apisero Inc. – Software Developer – India – JAVA | ORACLE | ETL | SPRING BATCH | KAFKA** Aug 2019 to August 2021

- Built **REST APIs** using **Spring Boot** for servicing orders between 4+ companies and its partners for automating purchasing process
- Optimized the performance of a compute expensive service by caching responses using **Memcached** for redundant requests by 40%
- Coordinated with product and sales team to develop a KPI analytics dashboard using **Splunk** for APIs exposed to the clients

**Ernst & Young – Software Developer – India – JAVA | SHELL**

July 2017 to August 2019

- Led efforts to build an in-house companywide communication tool broadcasting product update to all teams through Slack, email, and LinkedIn
- Created automation scripts to automate regression testing of applications which reduced testing efforts by 10hrs a week

## PROJECTS

**Disaster Response Dashboard – JAVA | React | KAFKA**

February 2023

- Scrapped data from twitter using TWINT API and streamed the data using **KAFKA** to the ML model for filtering disaster tweets using **Streams API**
- Performed **Exploratory data analysis** to filter out location and true disaster tweets
- Used **BERT**(Language model by google) to filter out details from the tweets and pushed to **KAFKA** topics
- Coded the front end using **React** to display a map with hotspots for disasters and description of recent disasters

**Gene-Pathogen Correlation – PYTHON | SCIKIT-LEARN**

November 2022

- Collaborated with researchers to find effectiveness of different machine learning algorithms such as Naive Bayes, K nearest neighbors and decision tree to find correlation between gene subsequence and its related disease and possibly predict any diseases
- Identified k-NN model had better accuracy compared to other models by a ratio of 33%

**Flower classification using K-Means Clustering – PYTHON**

October 2022

- PCA with eigen decomposition for dimensionality reduction
- Implemented k-means clustering algorithm from scratch and trained model
- Achieved an accuracy of 91%

**Clone of the Yelp website – JAVA | SWING-UI | ORACLE**

February 2022

- Listed multiple facets and generated SQL queries based on facets selected
- Paginated results based on requests created from front end
- Implemented lazy loading on listing outlets on website

**Soccer Analytics Dashboard – JAVA | SPRING | REACT | MySQL**

January 2022

- Utilized Spring Batch to process data from dataset and load it to MySQL database
- Created REST APIs for various resources like fixtures, teams, and squads to return JSON responses
- Developed a front end with REACT and Redux for state management

## TECHNICAL SKILLS

**Programming Languages:** Java, JavaScript, C, C++, Shell script, Python, HTML, CSS

**Tools and Frameworks:** Hibernate, Spring, React, SVN, Git, SQL