# K Sundar Rajan

SOFTWARE ENGINEER

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## Work Experience

**Freshworks Inc.** *Chennai*
SOFTWARE DEVELOPER INTERN *July 2020 - Ongoing*
- Containerized a multitude of frameworks like Cassandra, Elasticsearch, Redis, etc. using Docker and enabled communications between them using host network and volumes. Reduced the RAM consumption from around 6 GB to 3 GB and reduced the storage used by 80%.
- Wrote a cookbook in Chef Infra and deployed using Opsworks, which contained recipes to automate the log rotation from an EC2 instance to an S3 bucket.

**Freshworks Inc.** *Chennai*
SOFTWARE DEVELOPER INTERN *May 2018 – July 2018*
- Integrated 3rd party apps such as Tokbox, ZOHO Books, ZOHO Inventory, etc with the Freshdesk helpdesk software and also built employee productivity tools on it using Freshdesk's SDK built on NodeJS.

## Education

**SSN College Of Engineering** *Chennai*
B.E. IN COMPUTER SCIENCE AND ENGINEERING *August 2016 – May 2020*
- CGPA : 8.22

## Projects

**Distributed Data Pipeline for Identifying Cab Hotspots using geofencing in Real-Time** *Chennai*
TECHNOLOGIES USED - APACHE PULSAR, REDIS, GOOGLE BIGQUERY, PYTHON, NODEJS *November 2019 - March 2019*
- Set up a 3 node Pulsar cluster to ingest live stream of location coordinates from cabs which is transformed to its corresponding geofence using pulsar functions and then stored in a Redis datastore, plotted on Google Maps to identify cab hotspots in real-time.
- Periodic snapshots of redis table is taken and stored in Google BigQuery for analytics.

**Elevator Simulation** ⌂ *Chennai*
TECHNOLOGIES USED - PYTHON,FLASK,JAVASCRIPT *September 2019 - October 2019*
- An application which simulates the functioning of K elevators in an N floored building using 2 algorithms - Shortest Path First and Look.

**Adaptor Application for ML Facilitation** ⌂ *Chennai*
TECHNOLOGIES USED - PYTHON, POSTGRES, JAVASCRIPT, FLASK *December 2018 - February 2019*
- Created an adaptor application using Python & JavaScript which helps users feed any ML algorithm to the application, connect to a database(Postgres) and point to a table, choose the dependent and independent variables from the table, run the given ML algorithm and see the predictions in an user friendly way.

## Technical Strengths

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| **Languages** | C++ · [Fluent]; Python, JavaScript, HTML/CSS, SQL, NodeJS · [Comfortable]; Java · [Beginner] |
| **Technologies** | Microsoft Azure, Docker, Redis, Apache Pulsar, Postgres, Chef Infra, AWS |
| **Skills & Interests** | Distributed Systems, Streaming data, Pub-sub systems & message queues, Data Structures, Algorithms |

## Achievements

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| 2017 | **ACM ICPC,** Member of team Code_Overload which ranked 51st in Asia Regionals - Kharagpur⚷ |
| 2017 | **ACM Provincial Contest '17,** Member of team Code_Overload which ranked 4th in Chennai Regionals⚷ |
| 2016 | **Indian National Olympiad in Informatics(INOI),** Qualified by clearing Zonal Computing Olympiad |
| 2018,2019 | **Facebook Hackercup,** Cleared qualification and first round |
| 2018,2019 | **Google Code Jam,** Cleared qualification and first round |
| 2016-19 | **Technical Symposiums,** Won several programming contests in various college techfests |

## Organizations and Interests

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| **Google AI \| Explore ML** | Student Facilitator for the Google AI's Explore ML Program. Conducted ML workshops for college students. |
| **Codechef Trainer** | Trainer at a week long programming workshop conducted by Codechef for School and College students. |
| **Competitive Programming** | Active Problem Solving on Codeforces and Codechef |
| **SSN Coding Community** | Head of SSN Coding Community - MAXFLOW. Taught and mentored students for 4 years, conducted weekly meetings and programming contests on various platforms. |
| **Professional Carnatic Violinist** | Music lover. Performed over 300 concerts in various prestigious halls all over India such as Shanmukhananda Hall (Mumbai). |