

# K Sundar Rajan

SOFTWARE ENGINEER

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## Work Experience

### IIT Madras

Chennai

INTERN

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.

### Freshworks Inc.

Chennai

SOFTWARE DEVELOPER INTERN

May 2018 - July 2018

- Integrated apps such as Tokbox, ZOHO Books, ZOHO Inventory, etc with the Freshdesk helpdesk software 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 : 8.20

## Projects

### Geo-Fencing Based Approach for Identifying Cab Hotspots

Chennai

TECHNOLOGIES USED - APACHE PULSAR

October 2019 - Ongoing

- Identifies the cab hotspots in a geo-location based on the live location of cabs which is a stream data ingested into the pulsar message queue.
- Sends an alert if the cab density in any geo-location exceeds a certain threshold value.
- Predicts the cab demand for the next day based on historical data.

### 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.

### Speech Recognition

Chennai

TECHNOLOGIES USED - PYTHON,TENSORFLOW,MICROSOFT AZURE

October 2018 - December 2018

- Recognised several words from speech dataset available in the Tensorflow website by converting it into spectrogram images. Different CNN architectures were run in a Microsoft Azure Standard NC6 (6 vcpus, 56 GiB memory) instance and the best model(best accuracy) was obtained.

## Technical Strengths

Languages	C/C++ (Proficient) ,Python (Adept), JavaScript (Adept), HTML/CSS (Adept), SQL(Adept), Java (Beginner)
Technologies	Apache Pulsar, Microsoft Azure, Flask, Postgres, Tensorflow
Skills	Data Structures, Algorithms, Deep Learning, Distributed Systems

## Achievements

- 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

## Certifications

- 2018 **Neural Networks and Deep Learning**, Coursera
- 2018 **Improving Neural Networks: Hyperparameter tuning, Regularization and Optimization**, Coursera
- 2018 **Structuring Machine Learning Projects**, Coursera

## Organizations and Interests

<b>Google AI   Explore ML</b>	Student Facilitator for the Google AI's Explore ML Program.
<b>Codechef Trainer</b>	Trainer at a week long programming workshop conducted by Codechef for School and College students.
<b>Competitive Programming</b>	Active Problem Solving on Codeforces and Codechef
<b>SSN Coding Community</b>	Head of SSN Coding Community - MAXFLOW
<b>Professional Carnatic Violinist</b>	Music lover. Performed over 300 concerts in various prestigious halls all over India such as Shanmukhananda Hall (Mumbai).