# 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

**A geofencing based approach for identifying cab hotspots**                                                *Chennai*
TECHNOLOGIES USED - APACHE PULSAR                                                       *September 2019 - Ongoing*

- Identifies the cab distribution problem (hotspots) in a geo-location based on the live location of cabs which is a stream data and sends an alert if it exceeds a certain threshold value, using Apache Pulsar - distributed pub-sub messaging system which has both stream processing and computational capabilities. It also predicts the cab demand for the next day in a geo-location using the historical data which is available.

**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.

## Skills & Technologies

**Languages**   C/C++ (Proficient) ,Python (Adept), JavaScript (Adept), HTML/CSS (Adept), Java (Beginner)
**Skills**   Data Structures, Algorithms, Deep Learning, SQL, Distributed Systems, Apache Pulsar

## Achievements

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|---|---|
| 2017 | **ACM ICPC,** Qualified for Asia Regionals Kharagpur |
| 2017 | **ACM Chennai Provincial Contest '17,** 4th place |
| 2016 | **Indian National Olympiad in Informatics(INOI),** Qualified for INOI by clearing Zonal Computing Olympiad(2016) |
| 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

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|---|---|
| 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

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|---|---|
| **Google AI | Explore ML** | Student Facilitator for the Google AI's Explore ML Program. |
| **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 |
| **Professional Carnatic Violinist** | Music lover. Performed over 300 concerts in various prestigious halls all over India such as Shanmukhananda Hall (Mumbai). |