

# S. A. Kumar

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## EDUCATION

### IIIT, ALLAHABAD

B. TECH. IN INFORMATION TECHNOLOGY  
 June 2015 | Allahabad, India  
 Cum. GPA: 4/4

### D. A. V. PUBLIC SCHOOL

Grad. May 2011 | W.B., India  
 CBSE Grade 12th Exam – 9.0/10  
 CBSE Grade 10th Exam – 9.6/10

## SKILLS

### PROGRAMMING

Over 10,000 lines:  
 Python • C++ • GoLang • Java  
 Over 5,000 lines:  
 Javascript • Ruby • Rust

### FRAMEWORK

Flask • Play • Rails • Express.js  
 Pytorch • Tensorflow • AngularJS •  
 ReactJs

### DATABASE

• BigQuery • Presto • Postgres  
 • ElasticSearch • Hive • Redis  
 • MySQL • MongoDB

## LINKS

Github:// [ksavinash9](#)  
 LinkedIn:// [kumarsa9](#)  
 Topcoder:// [ksavinash](#)

## COMPETITION

### ACM International Collegiate Programming Contest

11th/822 | Team Corleone  
 Dec 2013 | Kharagpur, India  
 Secured 11th Rank out of 822 teams for  
 ACM-ICPC Asia Regionals.

## INTERESTS

Computer Vision  
 Machine Learning  
 Artificial Intelligence  
 Designing Scalable Architecture  
 Algorithms and Problem Solving  
 Open Source Contribution

## EXPERIENCE

### LYFT INC | Palo Alto, USA | 2018 – Present

#### SOFTWARE ENGINEER IN SELF-DRIVING DIVISION OF LYFT

- Joined **self driving technology** division of Lyft. Led multiple projects, filed patents, managed two interns and conducted interviews.
- Led a team of 4 engineers to build data pipelines, services and ML models to generate and serve trajectories for 5 teams in self driving division.
- Led a team of 6 engineers to build a **SSDLite** model for parsing and fraud detection of credit cards using **TensorflowLite** and **Active Learning**. This project received **5 Million** impressions per month and generated ARR of **\$XX Millions** for Lyft.
- Led a team of 5 engineers to build a real-time detection engine of risky and fraudulent drivers. This project evaluated 100K drivers every minute and saved ARR of **\$XX Millions** for Lyft in insurance costs.

### AMAZON DEVELOPMENT CENTER | Berlin, Germany | 2017 – 2018

#### SOFTWARE DEVELOPER IN CORE MACHINE LEARNING TEAM

- Joined Computer Vision team in **Core ML** org of Amazon.
- Wrote the data collection, training, validation and metrics pipeline to productionize a **CNN** model to grade the quality of perishable food at scale.
- Led a team of 3 engineers to build a central hub to store ML models and publish metrics. This product was used by 10 teams to store >200 ML models.

### NINJAVAN | Raised \$400 Millions | Singapore | 2016 – 2016

#### BACKEND DEVELOPER IN ROUTING TEAM

- Used **Java Play** and **K8s** to write micro services to improve the routing and delivery of 300K packages/day across 6 countries in South East Asia.
- Wrote a genetic algorithm based routing engine to improve the same-day delivery of packages. This service reduced the average delivery time per package from 32 minutes to 24 minutes.

### HOUSING.COM | Raised \$150M | Mumbai | 2015 – 2015

#### BACKEND SOFTWARE DEVELOPER IN GEOLOCATION TEAM

- Wrote an ETL for **indexing** of over 20 millions geo-spatial coordinates in Redis and ElasticSearch using **GoLang** and **RabbitMQ**
- Performed on-call, maintained and improved latency of Tier 0 APIs at **10,000 QPS** using **ElasticSearch**, **Redis** and **Ruby on Rails**.

### GOOGLE | Bangalore, India | 2015 – 2015

#### SOFTWARE ENGINEERING INTERNSHIP IN FULL STACK

- 6 months internship at subsidiary of Google Cloud Platform, APIGEE.
- Wrote pre-alert feature based on anomalies detection in **Node.js** which increased the alert accuracy by 145%.
- Added a graphical UI for real-time analytics in **AngularJS**

## AWARDS/WORKS

2020	Won 2 prizes	Inventor Awards at Lyft for filing patents
2015	Won 3 prizes	Topcoder Development Challenges
2013	3rd/108	Topcoder Game Design Challenges
2015	Won 4 prizes	Topcoder Assembly Challenges
2013	71.14%ile	Topcoder Algorithmic Competitions
2018	Open Source Contribution	Contributed to Google's Cartographer project