

# Siddharth Kumar

San José, CA

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## Summary

- Industry experience building large-scale predictive models using recurrent neural networks.
- Industry experience working on Full-stack web development using Java Spring Boot and AngularJS, building REST APIs.
- Hands-on experience developing building distributed applications using Apache Spark and Kafka.

## Technical Skills

- **Languages:** Java, C++, Python, R, JavaScript, HTML and CSS
- **Big Data:** Apache Spark, Apache Hive, Apache Kafka
- **Web Frameworks:** Node.js, Express, AngularJS, React, Redis
- **Machine Learning:** Tensorflow, Keras, Caffe, NumPy, Pandas
- **Databases:** PostgreSQL, MySQL, PL/SQL, MongoDB(NoSQL)
- **Cloud:** AWS, GCP, Azure, Alicloud, Docker
- **Tools & IDEs:** Apache Maven, Gradle, Jenkins, Grunt, Git, Eclipse, Android Studio, Jira

## Education

- **San José State University** **CGPA: 3.72/4.0** **San José, CA**  
*Master of Science, Computer Science* *Aug 2017 – May 2019*
- **Indian Institute of Engineering Science and Technology** **CGPA: 3.52/4.0** **West Bengal, India**  
*Bachelor of Engineering, Computer Science* *Aug 2012 – April 2016*

## Work Experience

- **Full-stack Development Intern, Hypergrid Inc., San José** **June 2018–Present**
  - Developed REST endpoints for several new features in the platform's latest release, making them available to the customers.
  - Migrated the Solr dependencies to Postgres to improve application availability and maintainability, reducing memory usage by almost 20%.
  - Optimized the VM provisioning by integrating Redis in-memory caching, substantially speeding up the data intensive operations.
  - Integrated machine learning based VM recommendation engine to the platform, makes VM configuration recommendations based on user requirements, reducing the usage cost.*Technologies: Java, Springboot, Gradle, JavaScript, Angular JS, Python, PostgreSQL, RESTful web services*
- **Application Developer, Accenture, India** **August 2016–May 2017**
  - Enhanced and maintained enterprise Java applications in Spring MVC and AngularJS.
  - Designed scripts for automated reporting of product data using Python and Shell scripting, substantially reducing the time needed for generating reports previously completed manually.
  - Contributed to the development of Accenture Automatic Ticket Resolver, aimed at reducing the average issue resolution time to 2 hours*Technologies: Java, JavaScript, Angular JS, JQuery, Shell Scripting, Python, Maven, PL/SQL, RESTful web services*
- **Undergraduate Research Intern, Indian Institute of Technology, Patna, India** **May 2015–July 2015**
  - Created an aspect-based sentiment classifier for online user reviews. More fine-grained sentiment analysis, giving the review for each aspect in a review.
  - Developed models for automatic extraction and classification of aspect terms and sentiments using both Conditional Random Field (CRF) and Support Vector Machines (SVM).*Technologies: Java, Shell Scripting, Machine Learning, Support Vector Machines.*

## Relevant Projects

- **End-to-End Speech Recognition Using Recurrent Neural Networks**
  - Tested different speech recognition techniques based on LSTMs using Connectionist Temporal Classification loss function.
  - Performed experiments using different models with language models on the Wall Street Journal Dataset.
  - Currently testing and implementing models based on dilated causal convolution layers.*Technologies: Python, Tensorflow, NumPy, Neural Networks*
- **Faster R-CNNs with Modified Region Sampling**
  - Implemented Faster R-CNN framework using TensorFlow and tested it on Pascal VOC 07, 12 and MS COCO datasets.
  - Proposed modifications to the region proposal method, which slightly improved the mAP during testing.*Technologies: Python, TensorFlow, Deep Learning, Convolutional Neural Network, Deep Residual Networks*
- **Distributed Convolutional Neural Network using TensorFlow**
  - Implemented deep convolutional neural networks in TensorFlow for distributed training.
  - Trained and tested the model using the CIFAR-10 dataset for building an image classifier.
  - Developed the program to perform parallel distributed training on several nodes on Google Cloud reducing the training time by almost 40%.*Technologies: Python, TensorFlow, Deep Learning, Convolutional Neural Network*