

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

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

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 recognitions techniques based on LSTMs and Connectionist Temporal Classification loss function.
 - Performed experiments using different 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 CIPAR-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***