



Education

Program	Institution	%/CGPA	Year of completion
Dual Degree (B.Tech+M.Tech), CSE	Indian Institute of Technology, Madras	8.13	2019
XIIth Std. (AP State Board)	Narayana Junior College	98.7	2014
Xth Std. (CBSE)	Bharatiya Vidya Bhavan Public School	10	2012

Scholastic Achievements

- Secured All India Rank 334 in JEE-Advanced 2014 (formerly IIT-JEE) examination.
- Secured All India Rank 58 in JEE Mains 2014.
- Secured State Rank 137 in EAMCET, Andhra Pradesh Engineering Entrance Test.

Professional Experience

Research Intern at Indian Institute Of Technology Hyderabad

Winter 2017

Distributed Machine Learning, [Link](#)

Hyderabad

Worked under the guidance of Dr. C. Krishna Mohan, Associate Professor, CSE department, IIT Hyderabad.

- Implemented a distribution preserving kernel support vector machine which retains the first and second order statistics of the entire dataset in each of the local partitions
- Implemented distributed parallel algorithms for the existing sequential K-Means++ and GMM algorithms for big data.

Google Summer Of Code 2017, FOSSASIA

Summer 2017

ReactJS Developer, [Link](#)

Work From Home

- Developed a web application capable of chat and voice interaction, for SUSI.AI, an intelligent open source personal assistant which uses custom defined skills to reply to user queries and also has different personalization features.
- Auto deployed the server on Google Cloud with Kubernetes such that on every commit pushed to the github repository, using Travis CI, a new docker image is built and the docker hub image and cloud deployment get updated.

Summer Intern at American Express

Summer 2017

Data Analysis and Machine Learning, R language, [Link](#)

Gurgaon

- Using the past FICO scores of a card member, predicted FICO score in the future, by building different models using Time Series and Machine Learning Techniques like: ETS, ARIMA, Regression, Neural Networks.
- Received a Pre-Placement Offer.

Summer Intern at MyAlly.ai (Formerly Skedool.it)

Summer 2016

Django developer, [Link](#)

Hyderabad

Worked on an AI powered assistant which automates scheduling of meetings through emails.

- Developed the backend for email interface, creating and editing calendar events using GMAIL and Nylas APIs.
- Created a facebook messenger bot which uses webhooks to reply to a customer.

Projects

Video Captioning with hierarchical LSTM and attention mechanism (Dual Degree project)

Ongoing

- A video captioning framework which automatically decides whether to use the visual information or adopt the language model to generate the next word for video captioning.
- Attention mechanisms are used such that visual information is used to generate visual words and the language model is used to generate the non-visual words.

Arithmetic Word Problem Solver (NLP course)

April-May 2018

- Developed a system which can solve simple arithmetic word problems involving addition and subtraction in natural language, by extracting a temporal state representation to build relevant equations and solve them.

Context Sensitive Spell Checker (NLP course)

March 2018

- Implemented a Spell Checker which provides spelling corrections by pruning down the search space of candidate words and using context and phonetic algorithms to improve the prediction accuracy and the performance of the system.
- Ranked 1st among 12 teams in IITM's NLP course, spell check contest.

Data Classification Models (DL & PR course)

March 2018

- Implemented a CNN for image classification on Fashion-MNIST dataset and applied guided back-propagation on intermediate convolution layers to visualize patches in the image which excite a particular neuron.
- Implemented classification models including KNN, GMM, Multi-Layer Feed Forward Neural Network, and SVM.

Sparse Graph Coloring on GPU (Course project)

Nov 2017

- Implemented a parallel speculative greedy algorithm for graph coloring and compared the topology-driven and data-driven implementations with the sequential implementation on large scale datasets (order of 10^6 nodes).

Twitter Streamer (Course project)

Jan-Mar 2017

- Developed a web application that filters the real-time tweets based on the keywords and location provided and pushes them onto kafka queues established on several nodes which are then consumed and visualized on a map.

Proxy - Easy Attendance (Course project)

Jan-Mar 2017

- Developed a django web application that uses face recognition to identify students from images of the class.
- The application can be used to ease the process of collecting attendance in educational institutions.

Computer Networks and Network Security (Lab projects)

Jan-May 2017

- Implemented various network protocols including GBN, Slotted Aloha, TCP Congestion Control and OSPF Routing.
- Implemented Kerberos v5 Authentication Dialogue, SSH Server-Client Functionality and simulated network attacks after setting up a simple Intrusion Detection System (IDS) using Mininet and Snort.

Compiler for MiniJava (Course project)

Jul-Nov 2016

- Implemented all stages of a compiler for a subset of Java called MiniJava, using Bison, Flex and Java tree builder.
- Implemented macro expansion, semantic analysis, register allocation and conversion to machine-level code.

Course Work

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|-----------------------------------|--------------------------------|
| Deep Learning | Natural Language Processing |
| Cryptography and Network Security | Data Structures and Algorithms |
| Software Engineering | Cloud Computing |
| Database Systems | Compiler Design |

Skills

- Languages known: C, C++, Java, Python, R, Matlab, HTML, CSS, CUDA, OpenMP, OpenMPI
- Tools and Frameworks: Django, ReactJS, Git, Teradata, Winscp, SAS

Positions of Responsibility

- Teaching Assistant for Programming and Data Structures Lab, Jul-Nov 2018.
- WebOps (Web Operations) Core, Exebit (Technical Fest of IIT Madras, CSE Department) 2018. ([Link](#))
- Hospitality Coordinator, Saarang (Cultural Fest of IIT Madras) 2016. ([Link](#))
- Finance And Sales Coordinator, Shaastra (Technical Fest of IIT Madras) 2016. ([Link](#))
- Deputy Placement Coordinator, CSE Department 2015-2016. ([Link](#))
- MITR (Mentoring for Individual Transformation) Mentor for 7 first year students 2015-2016. ([Link](#))