

Aditya Chandupatla

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Education	B.Tech in Computer Science and Engineering - 88.09% <i>Gold Medalist</i> Jawaharlal Nehru Technological University Hyderabad, College of Engineering, Hyderabad	2013 - 2017
Experience	Software Engineer, Teradata, Hyderabad, India	July, 2017 - Present
	<ul style="list-style-type: none">As part of the Core Teradata Database R&D Engineering team, I have implemented a POC (Proof of Concept) to accelerate database aggregation operations using GPU (NVIDIA GeForce GTX 1070). Achieved a performance boost of up to 3X on a dataset containing 32 million records.Integrated Google's distributed 'Tensorflow,' a deep-learning framework, into Teradata with the help of table-operators to provide the end user with capabilities to run analytical queries.Worked on scalable micro-services architecture for automating data migration. Estimated the time required for data migration by performing feature engineering and exploring a bunch of machine learning techniques such as "LinearRegressor" and "DNNRegressor."Was part of a team, building an error detection module, which analyses several logs by using 'Logstash' and sends the errors messages through Apache Kafka to the state-machines for performing analytics and root-cause analysis.Technologies: C/C++, CUDA (thrust library), Python, Java (spark framework), Docker	
	Intern - IT, VMware, Bengaluru, India	Jan, 2017 - July, 2017
	<ul style="list-style-type: none">Developed internal tools for Common SaaS Platform (CSP) team. The tools (dashboards) provided features using which the team can interact with the REST-API's, SOAP web services and perform database calls.Increased productivity, and accelerated deployment time, of the team by building a utility portal to compare configuration files, build versions and other deployment artifacts.Received a full-time offer from VMware for Application Developer role.Technologies: Java Spring framework, PHP, JS, Docker & Oracle Database	
	Android Developer Intern, Hedgehog Lab, Hyderabad, India	May, 2016 - July, 2016
	<ul style="list-style-type: none">Worked on BeHungry app, which is an instant-food-delivery mobile application. Implemented custom combo feature and re-designed the checkout screen functionality from scratch.Worked on Activities, Broadcast receivers and Services components of the Android system.	
Technical Skills	Languages - Python, R, C/C++, Java Analytics - Tensorflow, Numpy, Keras, Matlab/Octave Web - Javascript (MEAN stack), Python (Django), Java (Spring framework), MySQL Mobile - Android	
Relevant Courses	Data Structures and Algorithms, Artificial Intelligence, Machine Learning (Coursera) , Deep Learning (Coursera) , Statistics, Distributed Computing & Parallel Programming	
Achievements and Awards	<ul style="list-style-type: none">Night On The Town (NOTT) Award - Performance bonus award for making much appreciated 'above and beyond' contribution to Teradata from C. Jaiprakash, Engineering Manager and Raj Cherabuddi, VP & GM of Teradata IndiaBest outgoing student of B.Tech CSE - Awarded gold medal for my stellar academic performance by Prof. A. Venugopal Reddy, the Vice chancellor of JNTUH, and the chief guest, Prof. V. Ramgopal Rao, director of IIT DelhiDr. D Seetha Mahalaxmi Endowment Medal - Awarded gold medal by the Faculty of Computer Science Department in the remembrance of Dr. D Seetha Mahalaxmi for outstanding performance during my undergraduate	

- Ranked 992 in the [ACM International Collegiate Programming Contest](#) (ICPC) - Asia Amritapuri First Round Online Programming Contest - Team: CodePoets
- Code Quest and Jumbled Code - Stood 1st in 2 events conducted by the Computer science department of [University College of Engineering, Osmania University](#), as part of their annual level technical fest 'Infinity 2016'
- Data Triggs - Runners up in the event conducted by the Computer science department of [University College of Engineering, Osmania University](#), as part of their annual level technical fest 'Infinity 2016'

Selected Projects

All projects are available on my Github profile: github.com/adityachandupatla

- **Artificial Music Generation:** [Recurrent Neural Network](#) with LSTM units is used to generate artificial Jazz music. The network is trained to generate novel jazz solos.
- **De-biasing word vectors:** [GloVe word embeddings](#) are explored for gender bias and subsequently a de-biasing operation is performed on the word vectors to eliminate the bias. Used a 50-dimensional pre-trained GloVe vectors to represent word embeddings. [Cosine similarity](#) has been used to measure how similar two words are.
- **Deep Residual Network for Image Classification:** Residual Network, by [He et al.](#), is implemented in Keras, which is the default neural network architecture for very deep neural networks. In theory, very deep networks can represent very complex functions; but in practice, they are hard to train. Residual Networks, allows us to train much deeper networks than were previously practically feasible. By using Adam optimizer with categorical crossentropy loss function, a train accuracy of 92.24% and a test accuracy: 90.79% has been achieved on [SIGNS dataset](#).
- **Neural Style Transfer:** In this project, Art is generated by using Neural Style Transfer by [Gatys et al.](#) similar to [Prisma App](#). Optimized the cost function to generate pixel values, instead of generating parameters. Transfer learning has been used on a pre-trained [VGG-19](#) network.
- **Image compression:** This project is geared towards the usage of [K-means algorithm](#), which is an unsupervised learning algorithm, for performing image compression. Essentially, given an input image, which probably consists of a plenitude of colors in the form pixels, we cluster the colors which are related to each other and effectively compress the image by rebuilding the image with the cluster centroids themselves.
- **Movie Recommendation System:** Collaborative Filtering learning algorithm has been applied for building movie recommendation system. The dataset used, consists of ratings on a scale of 1 to 5. The dataset has 943 users and 1682 movies and is taken from "[MovieLens 100k Dataset](#)" from [GroupLens Research](#).
- **Insta-bot:** An Instagram-Bot which has the ability to interact with a given instagram feed. Features: Auto-Likes photos, Auto-Saves photos within instagram, Ability to black-list users, Watch stories.

Hobbies

Building projects to learn new technologies, Competitive programming, Writing answers on [Quora](#) and Articles on [Medium](#) and [GeeksforGeeks](#). In my free time I like to watch Marvel movies.

Website

Please visit <https://adityachandupatla.github.io/>