Aditya Chandupatla

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EDUCATION

- **University of Southern California** — Los Angeles, CA
  Master of Science in Computer Science — August 2019–April 2021
  Relevant Coursework: Operating Systems, Machine Learning, Analysis of Algorithms
- **Jawaharlal Nehru Technological University Hyderabad** — Telangana, India
  Bachelor of Technology in Computer Science and Engineering - 88.09% Gold Medalist — September 2013–June 2017

EXPERIENCE

- **Hulu | Software Developer Intern**, *Santa Monica, California* — June 2020–August 2020
  Distributed Tracing System – Developed a low latency (asynchronous) and secure (JWT) ingestion service that tracks events (1 million per day) occurring in Hulu's distributed metadata ETL pipeline, processing data from 20 different sources.
  End-to-end development – Responsible for writing source code, testing, containerization, setting up CI/CD pipeline using Jenkins and Spinnaker, and deploying into production on AWS cloud using Terraform and Kubernetes.
  Achievements – Added Kibana support to visualize several metrics such as: progress tracking, failure detection, alerts, and performance bottlenecks. Reduced time taken by developers to search metadata documents down to single-digit seconds while not violating tight SLA requirements of pipeline.
- **Teradata | Software Engineer**, *Hyderabad, Telangana* — July 2017–December 2018
  Analytics – Utilized micro-services architecture for automating data migration between two databases. Involved in extraction and development of feature set for time estimation task. Employed regression techniques to construct model and achieved an accuracy of 89%. Collaborated with a team of 15 engineers to create infrastructure for error detection module, to analyse logs from several services and push error messages to state-machines for performing analytics and root-cause analysis.
  Tensorflow – Integrated Google's distributed 'Tensorflow,' into Teradata by incorporating table-operators to provide end user with capabilities to run analytical queries right within database.
  GPU – Implemented a prototype 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.
- **VMware | Intern - IT**, *Bengaluru, Karnataka* — January 2017–July 2017
  Full-stack Web Development – Took initiative to engineer utility dashboard to provide unified view of plethora of micro-services. Using it, one can perform REST calls, interact with SOAP web-services, compare configuration files, build versions and monitor health of services. Led to faster deployment times, increased productivity and better communication between two teams.

TECHNICAL SKILLS

- **Languages**: Java, Python, C/C++, CUDA, SQL, JavaScript, HTML, CSS, PHP
- **Analytics**: Tensorflow, Numpy, Keras, Scikit-learn, Computer Vision (CNN's), Natural Language Processing (RNN's)
- **Frameworks/Tools**: Terraform, Kubernetes, Docker, Git, Java Spring, AWS (SQS, S3), Python Django, Apache Kafka, Apache Spark, Elastic stack (Elasticsearch, Kibana and Logstash), Android, Linux/Unix, Datadog

HONORS AND AWARDS

- **Night On The Town (NOTT) Award**: Won performance bonus award for contributing to Teradata from Engineering Manager and VP & GM of Teradata India.
- **Best outgoing student of B.Tech CSE**: Awarded best outgoing student gold medal, and Endowment Medal for stellar academic performance by University Vice chancellor and director of IIT Delhi.
- **Programming Competitions**: Ranked 992 in ACM International Collegiate Programming Contest (ICPC.) Stood 1st in multiple programming contests conducted by Computer science department of Osmania University.

PROJECTS

- **Weenix Operating System**: An operating system developed as part of course CSCI 402, at USC. Supports processes, threads, virtual file system and virtual memory. Considered one of most challenging graduate-level projects at USC. Received an opportunity to work as a Grader at end of course.
- **Large scale Data Mining using Apache Spark**: Utilised Apache spark framework to build some popular data exploratory algorithms such as: discovering frequent item sets, collaborative filtering and detecting communities in a dense social network.