

Uday Theja Madisetty

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EDUCATION

Columbia University

M.S in Computer Science, GPA 3.835/4.0

New York, NY

Expected Dec 2022

- Relevant Courses: Cloud Computing and Big Data, Distributed Systems, Software as a Service, Databases.

Indian Institute of Technology Madras

B.Tech and M.Tech in Computer Science, GPA 8.19/10.0

Chennai, IN

Jul 2019

- Teaching assistant for Programming & Data Structures Lab.
- Relevant courses: GPU Programming, Cloud Computing, Data Structures and Algorithms, Compilers, OS.

EXPERIENCE

Nutanix Technologies India Pvt. Ltd

Member of Technical Staff - 3, Cloud and Networking

Bengaluru, IN

Jul 2019 - Aug 2021

- Spearheaded an Identity Access Management (IAM) framework utilizing Attribute-Based Access Control (ABAC) to authorize user actions and provide data security.
- Devised a packet snooping mechanism leveraging PCAP to capture network information dynamically. Engineered large-scale artificial network traffic utilizing Scapy, and compared the performance between C and Golang prototypes.
- Engineered several health checks for the networking entities addressing around 500 customer cases. Diagnosed the networking data path issues during customer on-calls.
- Built a VM name resolution service for the on-premises deployments and won the annual Nutanix hackathon under the "Hybrid Cloud" category.

Google Summer Of Code, FOSSASIA

Software Engineering Intern

Remote

May 2017 - Aug 2017

- Devised web applications capable of chat and voice interaction and a content management system from scratch in React, for SUSI.AI, an open-source AI for personal assistants. Deployed the server on Google Cloud with Kubernetes.

American Express India Pvt. Ltd

Software Engineering Intern, Fraud Decision Science

Gurgaon, IN

May 2017 - Jul 2017

- Designed a robust prediction system in R language to analyze the historical FICO scores and forecasted the scores in the future to identify potential defaulters, by using techniques including ETS, ARIMA, and Regression.
- Received a full-time job offer for the exceptional work, to return after 2 years.

SKILLS

Programming languages

C/C++, Java, Python, Golang, Ruby, R, Matlab, Scala, ReactJS, SQL.

Libraries and Frameworks

Tensorflow, Django, Rails, CUDA, OpenMP, OpenMPI, Open vSwitch, Git, AWS.

PROJECTS

Dining Concierge AI Agent

Sep 2021 - Oct 2021

- Built and deployed a serverless, microservice-driven web application in Python to send restaurant suggestions given a set of preferences through user conversation.
- Leveraged AWS components: S3 bucket, API Gateway, Lambda functions, Lex chatbot, SQS, and Elasticsearch.

Video Captioning with Hierarchical LSTM and Attention Mechanism

Aug 2018 - May 2019

- Achieved a BLEU@4 score of 55.7% for a video captioning framework with hierarchical LSTM and temporal attention mechanism. The solution is designed to automatically use visual information to generate visual words and the language context information to generate the non-visual words in a caption.

Communication Avoiding Distributed SVM

Dec 2017 - Jan 2018

- Implemented a communication-avoiding distributed support vector machine to learn from multiple corpora of sensitive data with different parties without sharing the data. Programmed distributed versions of K-Means++ and GMM algorithms for big data adopting OpenMPI and OpenMP.

Twitter Streamer

Jan 2017 - Mar 2017

- Developed a web application to filter the real-time tweets based on keywords and location provided and push the tweets to Kafka queues established on several nodes, later consumed and visualized on a map.