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[portfolio](#)

Location: San Diego, CA

Education

University of California San Diego

March 2024

Master of Science in Machine learning and Data science

CGPA: 3.5/4.0

Indian institute of Technology Hyderabad

July 2020

Bachelor of Technology in engineering

CGPA: 9.1/10

Technical Skills

Languages: C/C++, Python, Java, Javascript, Angular, Kotlin, Prolog, Perl

Web Technologies/Frameworks: Google cloud, Android DB, Andriod studio, Docker, Firebase

Databases: Oracle SQL, MySQL

Data Science: Bert language models, Classical ML, DL, NLP, Explainable AI, Federated learning, Computer Vision, Deep generative models

Relevant Coursework

- Statistical learning
- Search and optimization
- Artificial Intelligence
- Data Mining
- Sensing and estimation
- Learning Algorithms
- Deep generative models

Professional Experience

ServiceNow, Software engineer | *Java, Js, Angular, Eclipse, Github*

June 2020 – August 2022

- Worked on integrating multiple rest api's with ITSM workflows for adding virtual bot capabilities like Citrix cloud virtual systems access, manage meetings and request item flow, also integrated the 10 topics with an NLU model for intelligent conversation flows driving 2 billion dollars of revenue every year.
- Designed and developed the success dashboard which provides a prebuilt analytics for 8 metrics like customer satisfaction score, cost savings etc to demonstrate the actual business value achieved through the top ServiceNow products.
- Streamlined the java code to demonstrate WebRTC screen share between Androids or Desktop browsers.

Myhome, Business analyst | *Matlab, Python, C++*

May 2019 – July 2019

- Researched on various technologies like scrap iron optimization, digital elevation models in the industry and performed cost-benefit analysis for checking the feasibility of the solutions

Academic Projects & Research Experience

Federated learning clients side pruning through mixed precision quantization techniques

Ongoing

- Working on novel client sided mixed precision quantization technique which out performs the hessian awareness spectrum quantization technique in terms of inference speed and developed new method using conformal predictions which selects the most efficient clients for high global model performance.
- Built gap acceptance behaviour model using dynamic and static gap for autonomous vehicles using federated learning.
- Working on client pruning methods based on dynamic and mixed precision accuracies of clients in federated learning setup.

Federated fine tuning of heterogeneous Large Language Models | *Python*

Ongoing

- Developing novel technique where a model is trained across multiple decentralized nodes (Edge devices), each with its own local data and this approach is beneficial for privacy and leveraging diverse data sources like autonomous driving vehicles

Phone location detection | *Colab, Python* [\[code\]](#)

Jan 2023

- Developed a prototype of a visual object detection system using Resnet, VGG16 Architecture to detect the phones from given images within a radius of 0.05 (normalized distance) centered on the phone

Interpretable Neural Additive Models to predict Coronary Heart Disease | *Python* [\[code\]](#)

March 2023

- In this project, we have developed an interpretable ML model to predict a patient for 10-Year Risk of future coronary heart disease (CHD) to identify most relevant risk factors for heart disease
- Performed Comparative Analysis of Interpretable ML models vs State of the Art Models and observed that our NAM model had a better AUC score than DNN.

Accolades/ Online Certifications

- Academic excellence award, IIT Hyderabad 2018
- Deep Learning and Natural language processing specialization, Stanford completed 3 out of 5 courses. 2020
- UCSD ECE Summer research internship scholar, UCSD 2023
- Teaching Assistant, Introductory courses in physics and chemistry departments website management 2018
- Silver medal, International Master Mathematics Olympiad 2013
- Student entrepreneurship association, UCSD 2023
- Representative of IITH in social online innovation collaborative hackathon 2020
- Achieved Skill development incentive program award, ServiceNow 2021