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EDUCATION

University of Southern California, USA | *Masters of Science in Computer Science*   **December 2022**
Courses: Analysis of Algorithms, Artificial Intelligence, Machine Learning for Data Science   **GPA: 4.0/ 4.0**

Gujarat Technological University, India | *Bachelor of Engineering in Computer Engineering*   **May 2020**
Courses: Data Structures, Object Oriented Programming,Database Management Systems, Web   **GPA: 9.02/ 10**
Technology, Compiler Design, Operating Systems, Data Mining and Business Intelligence

SKILLS

- Open source tools: Apache Hadoop,Pandas, OpenCV, TensorFlow, Keras, Scikit – Learn, PyTorch.
- Programming Languages: Python, Java, C++, C
- Data Visualization & Processing: Matlab, Octave, SQL, MySQL, MongoDB, Apache Spark
- Web Technologies: HTML, CSS, JavaScript, NodeJS, AngularJS, React, Vue.js, Redux, Flask, Django, PHP
- Cloud Infrastructure/ Container Tech: AWS, GCP, Azure, Docker, Kubernetes.

PROFESSIONAL EXPERIENCE

Full Stack Developer - Information and Science Institute - USC, Los Angeles, California   May 2021 - Present

- Developed multiple REST API tools using AngularJS and Flask to create experiment representation called Distributed Experiment Workflow, which provided platform for DeterLab: Cyber- Defense Technology Experimental Research Laboratory, which reduced the testbed experiment duration by 30% and improved the quality and reliability of results
- Developed a topology representation tool using Canvas in AngularJS to represent existing scripts in Python, further integrating it to a database using Flask framework.
- Utilized Docker to package the whole tool applications and further performing testing on Amazon EC2

Software Engineer - LogicRays Technologies Pvt Ltd, Ahmedabad, Gujarat, India   March 2020 – Nov 2020

- Utilized LSTM and RNN models for automating complaints classification of a customer query ticket management system which increased its efficiency by 80%, and created routes to integrate it to the system using Django
- Worked on an integral part of developing the whole management system for Poker game, devised Django REST API by writing Python script to store tournament details scraped from emails by Gmail Web Hook and Python RegEx into MongoDB database.
- Developed Front-end of the Pending Tournaments and Tournament pages using React

Machine Learning Intern - LogicRays Technologies Pvt Ltd, Ahmedabad, Gujarat, India   May 2019 - Nov 2019

- Developed a KYC documents image classifier using complex CNN model for 1000+ unstructured documents distributed over 30 classes, attaining over 95% accuracy and yielding upto 70% reduction of work time per document.
- Utilized OpenCV library to apply image smoothing, thresholding and morphological transformations on the document image
- Implemented k-means clustering for segmenting the whole document image , finding contours and segmenting the text in the images and further extracted texts using a pre-trained Keras OCR model
- Worked closely after developing a decision-support system for a well known Britain retailer, developed a Random Forest Regression model with WAPE ~ 13% to strategize product launching decisions over 20 categories.

PROJECTS

GoChecker Game Playing Agent (CSCI 561 Foundations in AI)

- Initially built an intelligent game playing agent using Alpha-Beta pruning algorithm, defeating 90% of the opponents in class tournament, further working to add Reinforcement Learning to the agent

ChatBot Application

- Developed a conversational agent with accuracy of 85%, using basic concepts of NLP of normalizing the text, converting the text to feature, text matching for comparing two messages.
- Initially input messages are first converted into tf-idf vectors for further applying cosine similarity with existing messages