ANIRUDH SRINIVASAN

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EDUCATION

Arizona State University, Tempe, AZ August 2021 – May 2023
Master of Science, Computer Engineering (CS Track)
SRM Institute of Science and Technology, India July 2015 – May 2019
Bachelor of Technology, Electronics and Communication Engineering

PROFESSIONAL EXPERIENCE

Data Engineering Intern, NBCUniversal, New York, United States June 2022 – August 2022
Active Account Generation Tool for Peacock

- Designed a user-friendly tool to extract Monthly Active Accounts for marketing and data science teams, supporting Peacock.
- Conducted advanced analysis of 200,000 Peacock Premium data points using cutting-edge techniques to gain insights.
- The tool was expected to boost conversions by 10-12% by converting Premium users to Premium Plus Peacock subscriptions.
- Designed and implemented a robust pipeline utilizing Airflow DAG to automate the process of generating active users.
- Ensured data accuracy and completeness by implementing thorough pre-execution validation and transformation of input.

Code Coverage for Core Functionality

- Developed comprehensive test cases using PyTest and Unittest frameworks, covering 90% of potential edge cases.
- Improved error handling by 20% with robust logical error checks and data type assertion for arrays.
- Adopted DevOps with Docker for image creation and code deployment, and Kubernetes for scaling on GCP.
- Continuously monitored and optimized application performance for reliability and scalability to meet changing business needs.

Software Engineer, Larsen and Toubro Infotech, India May 2019 – May 2021
Modern Browser and Grid Remediation

- Improved website functionality by 90% for 500k users using JavaScript (jQuery) and CSS (Bootstrap) for cross-browser compatibility.
- Conducted R&D to upgrade grid controls, resulting in cost savings by switching from Infragistics 17 to custom UI controls.
- Involved in migration of source code for over 180 applications from SVN to GitHub.
- Optimized website performance by reducing redirect chains and increasing load time by 20%.

Production Management and Support

- Created a template for Jenkins file following the declarative pipeline syntax to build, test and automate deployment of applications.
- Resolved complex table update issue by enabling auto-refresh feature through data analysis and integration expertise.
- Conducted intensive testing on all features and achieved a 100% pass rate for performance post the .NET framework upgrade to 4.8.

ACADEMIC PROJECTS

Offloading images and making prediction on parts of image **Nov 2022**
Utilized – Java, XML, Python, Flask, OpenCV

- Designed parallel image processing leading to a 40% reduction in processing time compared to single-device processing methods.
- Improved image processing speed by 50% with OpenCV implementation, including tasks such as resizing and thresholding.
- Installed the trained ML model on the slave devices to effectively predict on offloaded image parts in image processing pipeline.

Mobile Application to classify handwritten images of digits **Oct 2022**
Utilized – Java, XML, Python, Flask

- Utilized OkHttp library to manage network requests, ensuring efficient data transfer.
- Developed a CNN framework using Keras and TensorFlow libraries with the MNIST dataset to achieve 0.97 F1 score.
- Implemented a RESTful API to handle image classification requests from the mobile application and respond with results in real-time.

Weather Application **Jan 2022**
Utilized – JavaScript, HTML, CSS, OpenWeatherMap API, Node.js

- Implemented real-time weather data retrieval from APIs with fast response time (less than 1 sec).
- Developed Node.js server for real-time weather data retrieval, utilizing Express, HTTPS, and body-parser frameworks.
- Designed an interactive UI utilizing CSS frameworks like Bootstrap and Foundation.

Building a Spam Filter using Naïve Bayes **Sep 2021**
Utilized – Python, Pandas, NumPy, Sklearn

- Built a vocabulary accounting for case sensitivity and observed the word occurrences in every message.
- Classified messages achieved a True Positivity Rate of 0.988 on the validation dataset.

Product Price Comparison **July 2019**
Utilized – JavaScript, HTML, CSS, Microsoft SQL Server, C#

- Developed a product price comparison platform, with a database of over 10,000 products from 5 online retailers.
- Implemented web scraping to gather real-time product pricing data with less than 2% average discrepancy.
- Utilized Map API to return location of nearest product owner(s) in under 20 miles based on zip-code provided.

TECHNICAL SKILLS

Programming Languages: Python, Java, JavaScript, SQL, HTML, CSS, C#, PySpark
Frameworks: Dotnet, Express, Flask, NodeJS, Bootstrap, jQuery, FastAPI, ReactJS