PRATISHTHA SONI

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EDUCATION

California State University, Fullerton, California
Master of Science, Computer Science 3.7 GPA   August 2022 - May 2024 (*Expected*)

SRM Institute of Science and Technology, Chennai, India
Bachelor of Technology, Computer Science and Engineering 7.8 GPA   July 2015 - May 2019

SKILLS

Languages : Python**,** C++, SQL   **Cloud Services** : Amazon Web Services (AWS)

Tools & IDE's : Microsoft SQL Server, JIRA, Github, Git   **Web Technology** : Flask, Kafka, Api Development, Docker

Software Development Methodologies : Waterfall, Agile (Scrum)   **Operating Systems :** Linux, Windows

PROFESSIONAL EXPERIENCE

California State University, Fullerton, Fullerton, CA   December 2023 - Present
Research Associate
- Developing and implementing Machine Learning Models after collecting images and leveraging pre-trained models and data analysis, using opencv within Tensorflow and Keras frameworks to accurately predict food images.

California State University, Fullerton, Fullerton, CA   January 2023 - Present
Teaching Associate
- Teaching Python and C++ to undergraduate students.

ValueLabs, Hyderabad, India   February 2022 - Aug 2022
Senior Python Developer
- Developed and tested APIs for client website integration, optimizing cloud operations, achieving a 50% cost reduction, and improving process debug time for enhanced operational efficiency.
- Leveraged cloud-native services such as AWS Lambda**,** Amazon EC2 to build resilient applications, leading to a 30% enhancement.
- Troubleshooted Kafka producer and consumer scripts, deploying them via Git to the server, thereby resolving issues and ensuring the smooth transmission of live stream data across diverse Kafka topics, effectively managing over 1000 requests.

L&T Technology Services, Vadodara, India   June 2019 - February 2022
Software Engineer
- Developed automation python scripts to identify patterns after understanding technical designs of oil & engineering documents by leveraging existing organization NLP based platforms to achieve 70% of accuracy and saving 25 hours of manual work per week.
- Implemented solutions including automated data profiling processes, leading to a 20% reduction in time spent on data quality assessments.
- Independently executed data integration scripts using SSIS to read .json, .xlsx files and automated tabular data extraction by tableau and pandas library and export it to a predefined report format to help reduce manual data entry processes by 40%.
- Utilized Power Bi and SQL queries for conducting statistical data analysis to reveal meaningful patterns in the dataset.
- Created ETL pipelines to transfer data from various data sources after cleaning, removing outliers and preprocessing into data warehouses for reporting and analytic purposes.
- Incorporated agile ceremonies to address clients requirements, crafted ontologies and knowledge graphs with python for viewing relationships among 40+ excel sheets in Protégé.

ACADEMIC PROJECTS

Smart Laptop Recommendation *(python, tkinter, SPARQL, Rdf)*
- This project focuses on generating personalized recommendations for users based on their preferences using Sparql queries.

NYC Automated Traffic Volume Counts *(pandas, hadoop, java, spark, pyspark, mysql)*
- Examined data and its diverse trends by employing Spark queries on Google Dataproc within the Hadoop framework.

Crop Yield Prediction using Artificial Intelligence and Satellite Imagery *(opencv, scikit-image, tensorflow, pytorch)*
- Implemented a rule-based system to forecast crop yield production from a pool of collected data by applying Artificial Neural Network algorithm and Convolutional Neural Network algorithm with *89% accuracy.*

PUBLICATIONS & CERTIFICATIONS

- *Agricultural Crop Yield Prediction Using Artificial Intelligence and Satellite Imagery* on Eurasian Journal of Analytical Chemistry. 2019
- Attained Spot Award for Automation of Data Extraction in L&T Technology Services Limited.   2022
- Network Management certification course from IIT Kharagpur, India.   2017

LEADERSHIP EXPERIENCE

- **Organizer, Google Developer Group (GDG) Fullerton Chapter**   March 2023 - Present
  GDG is a community supported by Google. I lead the planning and execution of events like networking, workshops, and hackathons.