UMANG SINGHAL

Software Developer

umanglsinghal@gmail.com | +91 9724764223 | Chennai, TamilNadu

Linkedin | HackerRank | GitHub

EDUCATION

SRM Institute of Science & Technology

Chennai, Tamil Nadu

Bachelor's Degree Computer Science Engineering with Specialization in Big Data Analytics $\,$ June 2018 - May 2022

GPA: 9.75

Kendriya Vidyalaya No.1 Surat

Surat, Gujarat

Class 12th HSC March 2017 - March 2018

Percentage: 88%%

Kendriya Vidyalaya No.1 Surat

Surat, Gujarat

Class 10th SSC March 2015 - March 2016

GPA: 10

EXPERIENCE

Brillio | Software Developer

Bengaluru | Jul 2022 - Present

- Part of Cloud Technology Team
- Built and manage scalable, reliable data engineering pipeline that archived optimal performance by utilizing various cloud platforms and their services efficiently
- Delivered a seamless end-to-end telco solution for network operator by integrating the latest technology, Digital Twin.
- Conducted Workshop on AWS IOT Twinmaker and Azure Digital Twin @NIT Trichy
- Leveraged AI to drive innovative projects across diverse use cases, staying at the forefront of the industry trends and emerging technologies

Samsung Prism | Research Internship

Virtual | Jul 2021 - Nov 2021

- To build a AI/ML Research Project in the field of Automatic Speech Recognition. The goal is to make a English-Telugu Code-Switch Spoken Language Identification Model.
- The idea was to integrate the model with chat assistants like bixby.

National University of Singapore | Summer Internship

Virtual | Jul 2021 - Sep 2021

• The internship was a training programme by professors of NUS on Data Analytics using Applied Deep Learning. Build Projects on Image Classification and Sign Language to text using deep learning.

HP Enterprise | Summer Internship

Virtual | Jul 2021 - Sep 2021

• The internship was a 3 months training programme by HP Mentor on Artificial Intelligence & Deep Learning and learning the process of deployment and pipelining on cloud services like azure and learned priciples of SDLC documentation and wiki using azure devops.

Aaruush, SRM University | Committee Head

Chennai | 3/2020 - 4/2021

• Aaruush is a national techno-fest which takes place in SRM university every year. My role was of committee head of Workshops Team in which my responsibilities was to bring and convince as many as different companies to share their technology and insights of different streams to students.

SKILLS

Programming Languages: C, C++, Java, Python, R, SQL

Libraries/Frameworks: OpenAI, Boto 3, Librosa, Scikit Learn, MatPolib, Shiny, ARIMA, TenserFlow,

Numpy & Pandas

Tools / Platforms: Azure, AWS, GCP, Github, Google Colab, Kaggle, Visual Studio

Databases: Oracle, MySQL, Apache Spark SQL

Brillio | One Health Payer Competitive Intelligence

- Developed a data pipeline to convert multiple mrf files from nested JSON format to load into an SQL Database Redshift.
- Utilized services like S3, Lambda, AWS EMR (Apache Sparks jobs), and AWS Glue jobs.
- Created a CloudFormation Template for the data pipeline.

Brillio | Digital Twin Telco Solution

- With this project I was responsible for creating multiple 3d scenes and backend python code to simulate different environment in AWS IOT Twinmaker like network coverage, impact of changing 4G to 5G.
- Built Data connectors to get data from multiple data sources like IOT Edge and AWS Location Service.
- Designed Grafana Dashboard to show end to end demonstration.

Brillio | AzureAI SDLC Portal

- With this project I was responsible to automate the process of unit testing in github & gitlab by leveraging GEN-AI to generate testcases.
- Used Gen-AI to write Github Action scirpts to validate the different types of testing frameworks and tech-stacks.
- Used Azure Open AI and Azure Function App for backend.
- I was Responsible for the whole automation starting from arch-generation to validation to testdata generation through prompt-engineering.

Brillio | Cloud Analytics

- Led the development of real-time cost detail APIs for cloud infrastructure
- Programmed a cron job using AWS Lambda and Cloud Watch Alarm, SSM Agent and EC2 for regular data retrieval from the cloud, ensuring up-to-date insights.
- The whole architecture was built on microservices using flask, contributing to a scalable and efficient solution for monitoring and managing cloud infrastructure costs.
- Engineered the backend for a login flow, implementing JWT token for authentication.

Mermaid Testing Tool | GENAI Buildathon

• The idea was to generate test-case scenarios from the mermaid workflows and write selenium scripts using open-ai for automation testing.

Identifying Misleading Investment Claims | GFF 2023 SEBI Hackathon

- A end-to-end solution where the application interface is hosted on cloud instances and the backend leverages serverless architecture for optimized and scalable request handling. Users provide YouTube video or YouTube Shorts links.
- Post-processing, the claims asserted by YouTubers are cross-referenced with the Vectorized DB containing SEBI's comprehensive guidelines and documents from their website
- Implemented a user-friendly interface allowing input of video links to receive transparent insights and quoted sections

Priorty+ | Microsoft Fix-a-thon

- Priority+ proposes a solution to serve the hospitals by creating a unified eco-system that would solve the following issues like health disparities in terms of logistics support and distribution of equipments. Aided by effective supply chain management in term.
- Built a Figma Design and sample UI using Angular and secured runner up position in microsoft fixathon

CERTIFICATIONS

- AWS Certified Developer Associate(DVA-C02)
- Google Associate Software Developer (ACE)
- AWS Cloud Practitioner
- Microsoft Certified: Azure Fundamentals (AZ-900)
- \bullet NPTEL Database Management System
- Google Analytics for Beginners

Honors & Awards

- Won 2nd Runner Up at GENAI Rush Buildathon || Hack2Skill || TheProductFolks
- \bullet Brillian of the Quater
- Group Excellene Award By Brillio
- Group Excellene Award By Brillio
- \bullet Certificate of Excellence From Samsung Prism
- Second Runner Up in Microsoft Fix-a-thon 2021
- Merit Certificate at TechKnow 2018
- \bullet Second Position at 44th JNNSMEE Exhibition | IISC Bangalore | CBSE|NCERT | Kendriya Vidyalaya Sangathan |
- \bullet Second Position at 43rd JNNSMEE Exhibition | DRDO Hyderabad |CBSE|NCERT|Kendriya Vidyalaya Sangathan