

MANPREET SINGH

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TECHNICAL SKILLS

- Programming Languages/Framework: Python(primary), Spark, Java.
- Database/DaaS: Single Store DB, MongoDB, Cloud SQL, Big Query, SQL Developer, PL/SQL, RDS.
- Data Analysis and ML: NumPy, Pandas, Matplotlib, Keras, TensorFlow, Scikit, OpenCV.
- Tools and Technologies: GCP, Git, Bitbucket, Docker, SonarQube, Jira, PyCharm, AWS.
- Web Development: HTML, CSS, REST API, beautifulsoup, Fast API, Swagger API.
- Other: Airflow, PyTest, Unit Test, Pylint, Coverage, Sphinx, GitHub Action.

EDUCATION

Master of Applied Computing

University of Windsor, Windsor, Ontario

Jan 2022 - Present

- CGPA : 83.17%.

Bachelor of Technology in Computer Science and Engineering

Guru Gobind Singh Indraprastha University, New Delhi, India

Aug 2013 - May 2017

- CGPA : 74.42%.

PROFESSIONAL EXPERIENCE

Developer | Freelancer, Digital Asset Research, New York, USA

Feb 2022 - Present

- Migrated SQL SERVER relational database to a Single Store new SQL Database to reduce the overall maintenance cost of the Database.
- Designed a layer of procedure to implement RDBMS feature (foreign keys, unique keys, triggers) on Single Store.
- Develop multiple ETL processes using Kafka, Python, SQL and knowledge of AWS cloud computing features.
- Migrated entire database from MSSQL to SingleStore to reduces the client's monthly bill by USD 1000.

Senior Associate |AI-Specialist, Magic Finserv Private Limited, Noida, India

May 2021 - Oct 2021

- Supervised two projects in the field of FinTech and AI simultaneously under strict deadlines.
- Designed Jira approved one click end to end deployment CI/CD pipeline using GitHub actions.
- Led a team to construct a heuristic-based classification angle matching approach. The Algorithm will find cosine similarities between text fields of documents and recorded observations.
- Established complex data extraction/scraping approaches such as Dynamic scrapping and API extraction.
- Leveraged the above scrapping process to create multiple data access points, such as Swagger API, direct SFTP to Client servers, and WebSocket.

Software Engineer, Accenture Solutions Private Limited, Gurugram, India

Dec 2019 - May 2021

- Constructed a python based data curation deep learning framework for a US-based bank while operating under the Agile Framework (User Story Grooming, Sprint Planning, Sprint Retrospective).
- Implemented concepts of reinforcement learning to develop an ML module(leveraging different text matching algorithms) to showcase the mismatches in the data.
- Designed a functionality for interaction between Python and MongoDB consisting of CRUD operations (Create, Read, Update, Delete functionality for single or bulk records).
- Introduced practices such as unit testing (using PyTest), code and test coverage (using coverage), Code documentation (using Sphinx), and Static code analysis (using Pylint and Flake8).
- Implemented CI/CD process with bitbucket and Jenkins, leveraged SonarQube to monitor the quality of the product.

Associate Software Developer, Accenture Solutions Private Limited, Gurugram, India

Feb 2018 - Dec 2019

- Interacted directly with client SMEs to gather and translate business requirements into technical and functional design documents.
- Formulated a backend functionality for Ad hoc reports where a user can perform arithmetic operations on existing reports columns.
- Operated under cloud-based data engineering and analytical systems, using Google Cloud Platform services (Data Proc, cloud storage, big query and big tables).
- Devised functionality to transfer generated reports from GCP storage to shared drive location using airflow.

ACADEMIC PROJECTS

Loan Default Prediction, University of Windsor, Windsor, Ontario

May 2022 - Aug 2022

- Built a Web application for predicting whether a user is going to be a loan defaulter or not.
- Executed XGBoost classification algorithm for building the machine learning module.

Collect Object, University of Windsor, Windsor, Ontario

Jan 2022 - Apr 2022

- Built an Augmented Reality game. The game has been built for all age groups and has multiple modes corresponding to each age group using C# and Unity.
- Developed a PHP script to securely transfer data between game and database.

Other Projects

- Web Crawler: -A multithreaded web crawler, the crawler will parse the web, store it in a local system and rank based on word frequency.
- Introduction on how to create a Deep Learning module with images.
- Predicting house sale price using Ridge Regression.
- Forest Fires Data Analysis: Analyze yearly forest fire incidents in Brazil.
- EDA Approach towards McDonald Data: Exploratory Data Analysis of McDonald's Menu.
- SQL Air Quality Pollution Level: - Examine Air pollution levels all over the world.
- 40 years of Evolution: - Analyze evolution in bird species over 40 years.

CERTIFICATIONS

- Microsoft Certified:- Azure Fundamentals.
- Introduction to Deep Learning in python at DataCamp.
- Data Manipulation with Pandas at DataCamp.
- Introduction to MongoDB in python at DataCamp.
- Google Cloud Platform for Developer at Cloud Academy.
- Statistical Thinking in Python (Part 1, 2, Case Study) at DataCamp.
- IBM Data Science Professional Certificate Specialization at Coursera(9 Courses).
- LinkedIn Learning (Spark, Hadoop, MongoDB, Restful API, Software Design, Agile, JIRA, Testing)(10 courses).