# DEEPAK PANDEY

#### Gurugram, India

#### EXPERIENCE

#### Sr. Associate - Data Engineer

American Express

- Spearheaded the migration of Teradata-based reports to big data ETL using HiveQL and Pyspark (spark SQL), enabling 12 engineers to migrate 100% of the inventory before the target time.
- Architected a JIRA time tracking dashboard using Python, JIRA Rest API, SQL, and Tableau to enhance visibility and oversight of crucial agile metrics.
- Enhanced Hive job efficiency by optimizing Hadoop cluster metrics, and reducing iNode usage in the Linux namespace container bringing down disk I/O by 40%.
- Leading a team of 4 data engineers, and collaborating with leaders to define the roadmap, performance, and priorities for the team.

#### Associate - Data Engineer

American Express

- Directed the design of the next-generation analytical product framework, resulting in a 40% improvement in data quality and the solutions capable of handling >99% of engagements.
- Improved the execution time of existing HiveQL ETL pipelines by 35%, analyzing over 20k+ lines of code (LOC), and optimizing the queries, reducing 4k+ LOC in the process.
- Achieved a 95% reduction in time and human effort by automating over 20 Excel leadership reports through Hadoop, HiveQL, and SSIS ETL pipelines integrated with SSAS OLAP cubes for pivot-based reporting.
- Created MIS reports on the \$200B+ USA personal loans market using Experian, AWS EMR, and SSIS, resulting in timely and accurate delivery of key insights on 17+ companies to strategy teams.

## Analyst - Intern

American Express

- Engineered a micro-segment insights engine using Python and PySpark to identify the top 1% high-risk groups from over 1 million segment permutations.
- Eliminated over 100 hours of monthly manual effort by engineering data pipelines with Bash, Python, Hive, and an internal orchestration tool for Amex risk team leadership.

#### EDUCATION

#### **Bachelor of Engineering in Information Technology**

Panjab University

Coursework: Computer Programming, Data Structure and Algorithms, Database Management Systems (DBMS), Operating Systems

#### **TECHNICAL SKILLS**

Languages/Tools/Systems: Python, SQL, Bash, ETL (Hive, SSIS), Git Technologies/Frameworks: Hadoop, Apache PySpark, Linux, Apache Airflow, GitHub, GCP( BigQuery, Compute Engine), Docker Soft Skills: Decision Making, Stakeholder Management, Ownership, Mentorship, Technical Communication

#### PROJECTS

#### Artha.io | React JS, Hardhat, JSON RPC

• Conceptualized and developed a web application allowing digital brands to mint unique NFTs and create DApps with a one-click app deployment feature. Link: Artha.io

#### Forgery Detection in Digital Images | Python, Streamlit, SQL, Pytorch

• Developed an image classification algorithm using deep transfer learning and image error level analysis, achieving over 95% accuracy on real-world datasets.

## CERTIFICATIONS

## Harvard Leadership Edge

Issued By Harvard Business Publishing Corporate Learning

**Statistical Analysis and Machine Learning** 

Issued by WorldQuant University

# February 2023 - Present

Gurugram, India

September 2020 ving over 95%

Mav 2022

# August 2021 - January 2023

January 2021 - June 2021

July 2017 - June 2021

Chandigarh, India

Gurugram, India

Gurugram, India