

Harshil Deepak Patel

College Park, MD, 20740 | +1 (240) 828-9036 | hpatel33@umd.edu | [LinkedIn](#)

EDUCATION

Master's of Science - Management Information Systems

Aug. 2023 - Dec. 2024

University of Maryland at College Park (Smith)

CGPA: 3.7/4.0

- Data Analysis in Python, Data Viz. in Tableau, Predictive Analytics & Data Mining, Statistical Modeling in R, Cloud Computing & Big Data, Digital Business Transformation Strategy, Health Informatics, Gen AI, Experiential Learning
- Terrapin Scholar award recipient, TOEFL **112/120**, Smith Masters Student Association & Adobe Ambassador

Bachelor of Technology - Computer Science

Aug. 2017 - May 2021

University of Mumbai

CGPA: 3.3/4.0

- DBMS, Data Warehousing, Software Engg., ML, AI, OOPM, Analysis of Algorithms, Data Structures, Data Networks

TECHNICAL SKILLS

Programming Languages: Python (NumPy, Pandas, Matplotlib, Plotly, Seaborn, Scikit-learn, bs4, re, NLTK, text blob, word cloud), R programming (tidyverse, tree, caret, glmnet, ranger, xgboost, vip), JSON, XML, HTML5, CSS3, PHP

Databases: SQL (MySQL, PostgreSQL, Microsoft SQL Server, HiveQL), NoSQL (MongoDB, Neo4j CypherQL)

ETL & BI Tools: MS Office (Excel, PowerPoint), AWS (S3, EMR, SageMaker), GCP, Apache Hadoop (PySpark, Pig, Hive), Anaconda Jupyter, Veeva CRM, R Studio, Tableau Desktop, Sisense, Maven, Lucid Chart, MATLAB, Figma, Jira

WORK EXPERIENCE

ZS Associates

June 2021 - June 2023

Business Technology Solutions Associate

- Operated in a dual role of a Data Engineer & a Business Analyst for the ZAIDYN Platform Professional Services.
- **Standardized** ZS' Digital Customer Engagement practice for global scalability of Pharma platform-based solutions.
- **Automated** the Field Insights & Veeva CRM apps' ETL pipeline setup, reducing implementation time by **35%**.
- Developed scripts & assets to generate **150+** metrics & attributes, pivotal for data-driven business decision making.
- Leveraged Apache Spark, HiveQL & AWS for activating **90+** healthcare-themed suggestions, actions & insights.
- Expedited the field activation app demo for a **prominent pharmaceutical client headquartered in the USA**.
- Led the pipeline setup of **AI/ML algorithms** enabling dynamic targeting of HCPs & predictive behavior analytics.
- Introduced parallel job processing & scheduling for omnichannel NBA processes, reducing no. of workflows by **60%**.
- Created a script to automate SIT test case checks to ensure system-wide DQM, saving **15%** execution time & effort.

Community Forklift

Oct. 2023 - Dec. 2023

Strategy Consulting Fellow

- Pro bono **Technology Consulting** to a for-profit organization, devising a comprehensive strategy to boost revenue.
- Executed customer feedback surveys & content hyper-personalized strategies for sales trend analytics via Tableau.

ACADEMIC PROJECTS

NBA Expansion Strategy - SAC Datathon | Excel, Tableau, Google Colab, PPT

Mar. 2024 - Present

- Case study analysis for the 5th Smith Analytics Datathon competition to be judged by **Deloitte's** Consultants panel.
- Developing a financial analysis on dataset comprising of all US cities to identify prime locations for NBA expansion.
- Proposing the technology to be used for a team promotional plan, backing all data-led findings with Tableau reports.

Trace3 - Capstone Project | Python, Visible Analyst, Project Libre, Smartsheets

Feb. 2024 - Present

- Operating in the role of a Business Systems Analyst, analyzing the as-is system & designing the to-be **Trace3** system.
- Building an advanced time-tracking, reporting & AI-powered summarization tool to create a project resource matrix.
- Leveraging the capabilities of Microsoft Copilot & creating a dynamic utilization dashboard integrating Smartsheets.

MLife Balance | PySpark ML, Spark SQL, Logistic Regression, One-hot encoding

Feb. 2024 - Mar. 2024

- Created a PySpark ML model for forecasting employee work-life balance scores & identifying top influencing factors.
- Utilized a range of Spark MLlib algorithms to enable frequent pattern mining, correlation analysis & spark streaming.
- Built a logistic regression model via String indexer, One-hot encoder & Vector assembler, gaining **74%** accuracy.

From Pitch to Payout | Python, Plotly, bs4, word cloud, NLTK

Oct. 2023 - Dec. 2023

- Pre-processed, visualized & analyzed diverse US Shark Tank show datasets from Kaggle to extract valuable insights.
- Researched co-investment patterns, entrepreneurial strategies, Shark sentiment analysis & business pitch outcomes.
- Crafted a **compelling client-focused story** through pertinent data visualizations & indispensable business insights.
- Presented the project's discoveries to the Dingman Center of Entrepreneurship at UMD to establish a feedback loop.

Dense Captioning of Images | Keras, TensorFlow, Flask, NLP

June 2020 - Apr. 2021

- Created a prototype website housing a CV & NLP-based ML model that generates accurate captions for images.
- Used a VGG-16 LSTM network & CNN-RNN architecture for training & testing of system; BLEU score of **0.66**.