# Abhinandan Pathak

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#### EXPERIENCE

### **Data Science Associate Consultant**

July 2023 – Present

ZS Associates

Bangalore, KA

- Conveyed the monetary impact of machine learning-driven Next Best Action in marketing to stakeholders.
- Collaborated with stakeholders to strategize various product initiatives aimed at maximizing revenue.
- Guiding and mentoring new associates throughout the project.

### **Data Science Associate**

June 2021 - June 2023

ZS Associates

 $Bangalore.\ KA$ 

- Engaged with clients to understand their requirements and framed them into concise problem statements.
- Served as a developer on a ML-based recommendation engine product for Fortune 500 pharmaceutical clients.
- Mentored colleagues to quickly get on-boarded on existing projects.

#### Projects

# NBA Impact Assessment | Python, PySpark, S3

- Measured the monetary impact of machine learning-driven Next Best Action in marketing using a family of causal inference methods.
- Communicated growth strategies to stakeholders through advanced analytics to drive maximum impact.

### Analytics commercial engine | Python, PySpark, Docker, Git, Bitbucket, Airflow, Kedro, S3

- Expanded the scalability of this product to various brands and implemented automation for delivering files to business users for streamlined review processes.
- Developed features and implemented the LGBM model to create a sequence-based recommendation methodology across variety of promotional channels.
- Performed periodic retraining of the LGBM classifier and regression models in response to data drift or declining model performance.

### Promotion Response and Touchpoint Optimization | Python, Gekko, Statsmodel, Databricks, S3

- Processed the marketing and sales data for modeling.
- Developed and deployed Linear regression model on Databricks to measure the impact of promotion on Sales.
- Optimized the allocation of budget across various promotional channels to maximize revenues.

### TECHNICAL SKILLS

Languages: Python, Pyspark, SQL, Matlab, R Deep learning Frameworks: Pytorch, Tensorflow

ML Libraries: ScikitLearn, Statsmodels, Optuna, HyperOpt, Numpy, Pandas

ML models: Linear Regression, Logistic Regression, Random Forest, XGBoost, LGBM, Transformers

Developer Tools: Git, Docker, Visual Studio Code, JIRA

Orchestration Tools: DataIKU, Airflow

### EDUCATION

# National Institute of Technology Karnataka

9.01 CGPA

Bachelor of Technology in Electrical and Electronics Engineering

Aug. 2017 - May 2021

### Publications

- 1. Teena Johnson, Abhinandan Pathak, Shantanu Ajay Arya, Sagar Dipesh Dahanuwala, Prathamesh Gachhi, and Tukaram Moger. Case studies of event detection for indian power system using signal processing methods. In 2021 31st Australasian Universities Power Engineering Conference (AUPEC), pages 1–6, 2021 (PublicationLink)
- 2. National Institute of Technology Karnataka. Method and system for major event detection in a power system. Number 408104, 2022 (PatentLink)