

Arpita Mangal

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PROFILE

MS in Business Analytics candidate & data science professional with 3+ yrs. of experience in financial services designing, developing, & implementing data-driven solutions. Cross-functional team player with strong technical skills.

Specialities: Customer Analytics, Product Analytics, Exploratory Analysis, Supervised & Unsupervised Learning

Libraries: Scikit-learn, TensorFlow, PySpark, Keras, Pyomo, Cvxpy, NLTK, Genism, SapCy, Matplotlib, Seaborn

Technologies: Python, SQL, NoSQL, R, Tableau, Excel, Git

Certifications: AWS Cloud Practitioner, SQL Advanced

EDUCATION

University of California, Davis

San Francisco, CA

Master of Science, Business Analytics (GPA 3.67/4.0)

Expected Jun. 2023

Highlighted Coursework: Machine Learning, Experimentation and Causal Inference, Big Data, Advance Statistics

Indian Institute of Technology Kharagpur

Kharagpur, IND

Dual Degree (BTech & MTech), Ocean Engineering and Naval Architecture

Jun. 2019

Highlighted Coursework: Recommender Systems, Educational Data Analytics, Foundations of Entrepreneurship

WORK EXPERIENCE

Qualcomm

San Francisco (Remote)

Data Scientist, UC Davis Practicum Project

Sep. 2022 - Present

Provided actionable insights to enhance branding by identifying user needs and preferences in mobile device market.

- Performed **sentiment** analysis of **20K+ tweets** with Qualcomm references, scrubbed using Twitter API in python.
- Identified **brand position** by scraping & analysing reviews, ratings & features of **2500+** mobile devices on Amazon.

Kotak Securities (Stock Broking Firm)

Mumbai, IND

Associate Vice President, Analytics

Jul. 2021 - Jul. 2022

*Increased **Customer Lifetime Value** from **\$100** to **\$200** by improving acquisition, activation, engagement & retention.*

- Increased engagement by 13% through **deep learning-based customer segmentation** for targeted merchandising.
- Built a **propensity data model** in python to **recommend stocks** based on factors influencing trading behaviour.
- Achieved 30% lower **acquisition costs** through optimized ad spend by building a **marketing-mix model** in python.
- Boosted retention by 4% by enhancing **customer journey** (CRM data) & coordinating with cross-functional teams.
- Evaluated impact of news and events on stock volume traded in cash & derivatives by calculating volume spikes.

Barclays

Pune, IND

Graduate Analyst – BA4 (Developer)

Jul. 2019 - Jul. 2021

Project: Developed features for Barclays Mobile Banking (BMB - Mobile application for Internet Banking of Barclays).

- Coded new app. features, accessibility enhancements while maintaining legacy code. Codebase: ~ 20000 lines.
- Experience in Git, JIRA, Confluence, X-code & Swift, familiarity in e2e design, development, testing & delivery.

*Hackathon: Built a **fraud detection model** to identify business banking mules and suggested prevention plans.*

- Reduced avg. detection time by **26%** by training an **XGBoost** model with high accuracy & specificity using sklearn.
- Classified **personas** to distinguish banking mules from legitimate customers leveraging **variable importance**.

PROJECTS

Warehouse Inventory Management, Optimization | Ongoing

Related Skills: Linear Programming, Network Flow, Forecast Supply & Demand, Time Series, Moving averages, Pyomo

Estimate Price & Substitute of Medicines and Pharmaceutical Devices | [Project Link](#)

Skills: Predictive Analytics, Natural Language Processing (NLP), Text Analytics, Doc2Vec, Data Mining, Genism, NLTK

Recommend Events in an event-based Social Network | [Project Link](#)

Skills: Collaborative Filtering, Cold-Start Problem, TF-IDF, K-means Clustering, Feature Engineering, Sklearn

Filling in Missing Values of Sea Surface Temperature | [Project Link](#)

Skills: Spatio-Temporal Dataset, Non-Negative Matrix Factorization, Convolutional Neural Network (CNN), MATLAB

ADDITIONAL QUALIFICATIONS

Awards: MSBA Fellowship, GSM Grant, 1st Position - Barclays Hackathon, Finalist -The Economist, Young Blood-GYWS

Internships: Cambridge Judge Business School (DE), Kotak Securities (DS), REDX Innovation Lab (ML), Flytxt (DS)

Volunteer (Leadership): Public Relations Officer - GYWS (Non-profit run by students of IIT Kharagpur to uplift rural areas & provide free education to underprivileged children), Governor - TAdS (Adventure Club, IIT Kharagpur)