Shubham Khode

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EDUCATION

University of Illinois Chicago *August 2021 – December 2022*
Master of Science in Business Analytics (GPA: 4.0/4.0)

Veermata Jijabai Technological Institute (VJTI), Mumbai, India *August 2012 – April 2016*
Bachelor of Technology in Electronics & Telecommunications Engineering (GPA: 7.5/10)

SKILLS

- **Technology:** Python (NumPy, Pandas, Scikit-Learn), R, SQL, C#, Spark, AWS (EC2, S3, Redshift), Git, Tableau, Power BI, Excel
- **Core Competencies:** Data Mining, Machine Learning, Predictive Modeling, Descriptive and Inferential Statistics, Clustering, PCA, Forecasting, Natural Language Processing (NLP), A/B Testing, ETL, Visualization, Jira, Agile Methodologies, DevOps

PROFESSIONAL EXPERIENCE

Chicago Transit Authority | Data Analyst Intern | Chicago, IL *September 2022 – Present*

- Develop statistical risk models using 50+ years of asset maintenance data for predicting mechanical failures & condition decay and assess its impact on cost, ridership, and customer service quality across systems
- Create performance dashboards & ad-hoc reports using Power BI and effectively communicate them to senior management

Wipro Limited | Business Analyst | Vienna, Austria *August 2019 – June 2021*

- Conducted data analysis using SQL and R on customer profiles as well as product, offer, and upgrade cycles to discover underlying patterns for mitigating churn rate; made recommendations to bump up retention by 15%
- Designed ETL pipelines to fetch and manipulate data from disparate transaction database systems and consolidate it into a data warehouse for downstream BI reporting & analytics
- Applied A/B testing on different variants of landing/product pages for optimizing client's online shop; lifted conversion rate by 7% and marked increase of ~$5M in revenue flow
- Identified borderline credit risk customers using ML algorithms; redesigned order workflows resulting in 2x faster lead time
- Built interactive Tableau dashboards for quick, actionable insights on core business KPIs; saved 8 hrs./week in manual reports
- Collaborated with key stakeholders and leveraged data-driven opportunities for aligning product roadmap to strategic goals

Wipro Limited | Software Engineer | Pune, India *August 2016 – July 2019*

- Analyzed business requirements, documented high-level technical specifications, and developed E2E solutions while ensuring feasibility & integration with legacy systems
- Developed and enhanced 5+ business-critical web applications in .NET to provide a unified experience across all platforms
- Automated log management using Python and prepared dashboards to monitor application activity and performance; improved resolution time for production bugs by 35%, saving ~$500K/year
- Implemented complex SQL scripts for applying pseudonymization; transformed 1M+ customer records with sensitive information using data masking procedures for EU GDPR compliance
- Explored historical sales & usage data and utilized prescriptive analysis for fine-tuning tariff portfolio based on levers such as voice & data volume, speed, add-ons, and promos; observed ARPU uplift of ~3%

PROJECTS

Fine-grained, Scaled Forecasting of Walmart's Retail Sales *(Python, Spark, Time-Series Forecasting)*

- Analyzed influence of factors like markdowns, holidays, fuel price, temperature, etc. on weekly sales over 450K+ datapoints.
- Built hundreds of time-series models in parallel by leveraging distributed data processing in Spark and generated precise forecasts for each store-department combination, achieving an 87% reduction in time for training collection of models.

Loan Default Prediction and Investment Decisions for Lending Club *(R, Exploratory Data Analysis, Classification)*

- Performed univariate, multivariate, and correlation analysis to find characteristics and driving features behind loan defaults.
- Trained models like Decision Tree, Random Forest, and GBM to predict probability of loan default and estimate expected annual returns. Evaluated performance using AUC, ROC, and lift curves and combined best models that maximized ROI.

Spotify – Popularity Prediction and Recommendation *(Python, Tableau, Regression)*

- Investigated and visualized various acoustic features to answer riveting questions pertaining to song and artist popularity.
- Experimented with different regressors using grid search to predict popularity of songs. Designed a recommender system based on neighborhood collaborative filtering with Cosine and Manhattan distances as similarity metrics.

Market Segmentation of Soap Company *(R, Clustering)*

- Executed k-means, hierarchical clustering techniques on purchasing behavior for customer profiling & targeted promotions.