Dr. Ayushi Agarwal

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Analytics professional with 4 years of experience in Data Science, generating insights, storytelling, automating, developing, and compiling reports and dashboards using Tableau. Proficient in Statistics, ML, Statistical Modeling, R, Python, SQL, Tableau **EDUCATION**

University of Connecticut – M.S. in Business Analytics and Project Management (GPA 3.6/4.0)

Banasthali University - Doctorate Degree | Management | Ph.D.

Banasthali University - Master's in Business Administration (Marketing/HR) (GPA 8.26/10.0)

Banasthali University - Bachelors in Home Science (B.HSC) (GPA 8.75/10.0)

Aug 2021-Present
July 2017-Dec 2021
July 2015-May 2017
July 2011-May 2014

SKILLS

Machine Learning: Logistic / Linear Regression, Decision Tree, Random Forest, Boosting, KNN, Naïve Bayes, SVM, PCA, Clustering, Time Series models, Neural Networks, NLP, Validation techniques, Market Basket Analysis, Variable Transformation Statistical Analysis: Hypothesis Testing, A/B Testing, Data Cleaning, Data Mining, ANOVA, Quantitative Analysis Data Analysis: Exploratory Data Analysis, Feature Engineering and selection, Text Mining, Customer Analytics Organizational Skills: Project Management, Leadership, Team Building & Collaboration, Risk & Cost Management Tools: Tableau, R, Python, SQL, Alteryx, Linux, MS Excel, SAS Enterprise Miner, MS PowerPoint, MS Word, MS Visio, SAS JMP, Pentaho, Google Analytics

PROFESSIONAL EXPERIENCE

CFPTRW | Banasthali Vidyapith | India | Research Analyst

July 2017-Dec 2021

Finance Analytics - Data Warehousing and Reporting

- Worked directly with stakeholders to identify prospect women beneficiaries for improving financial literacy and translate business needs into technology solutions using **Tableau and SQL**, **saving 120 Man-hours annually**
- **Data Engineering** | Aggregated beneficiaries' data from multiple sources using **ETL** and **SQL** for **data extraction** and **data manipulation**. Loaded data into data warehouse reducing data access time for four internal teams
- **Business Intelligence** | Created interactive **Tableau** dashboards for tracking the **MOM** growth of project using KPIs such as workshops, no of beneficiaries added, and bank accounts open. Provided higher management a one-stop dashboard to **track over 15 metrics**
- **Business Impact** | Provided Business Insights and recommendations to top management and cross-functional teams using **Tableau**. Worked on beneficiaries' survey data and categorized them using **net promoter scores (NPS)** into satisfied and unsatisfied customers. Used the insights to make the process and services more customer friendly.
- **Identified business** metrics for efficient **promotion of financial literacy** and advised marketing strategies to senior management to **reduce promotional cost by ~10%**
- Trained **new hires in exploratory data analysis, descriptive analytics, and predictive analytics**, helping them ramp up fast in technical knowhows

Punjab National Bank | India | Analyst Intern | Customer Analytics

June 2016-October 2016

- **Data Wrangling** | Analyzed large dataset of ~44M customers to Identify cross-selling opportunities and segmented customers using K-Means Clustering for various company products (consumer banking domain)
- Analyzed their spending pattern and demographics in **Tableau** on the data flowing from **CRM** (customer relationship management), Branch Banking and Marketing team; optimized the **marketing cost by 10%**
- Data Modeling | Build a Logistic Regression model on survey data with an accuracy of 78% to predict the probability of customers giving us negative ratings.
- **Business Impact** | Performed **market research** and **root-cause analysis** on problem areas influencing PNB customer base and coordinated with the marketing team to issue promotional offers to unsatisfied customers

Predictive Modelling and People Analytics

- Performed advanced **predictive analytics** by building statistical models like Logistic regression, Decision Trees and boosting using Python to find which of the employee's loans can be auto approved with an **accuracy of 88%**
- **Data Visualization:** Developed Tableau dashboard and Excel pivots showing employees that comply with organizational rules for an auto loan approval through classification models to reduce the workload of auditors, thereby saving **10 man-hours**
- Managed projects following **Agile-Scrum** methodology and handled Sprint planning, Daily Scrum and Backlogs

ACADEMIC PROJECTS

Customer Insurance Prediction | **Customer Analytics** | Identified key factors leading to Fixed Indexed Annuities contract cancelation and profiled customers on those factors. Predicted potential FIA contract termination by building a **Random Forest model with 71% accuracy**.

Cricket League Data Visualization | Visualized cricket league Data set by creating Dashboard in Tableau. Initially generated three visualizations and created an Interactive Dashboard. These visualizations gave many insights.

ACHIEVEMENTS

Publications: "EFFECT OF FINANCIAL EDUCATION MEDIATION ON IMPROVING THE FINANCIAL LITERACY OF STUDENTS" in "EXCEL International Journal of Multidisciplinary Management Studies"

"IMPACT OF TEACHER'S OWN PERSONAL FINANCE KNOWLEDGE AND QUALITY OF TEACHINIG SPREADING FINANCIAL AWARENESS AMONGST STUDENTS OF BANASTHALI VIDYAPITH" in "IIRAR"