429 Farmington Ave, Apt 102
Hartford CT 06105

AMBIKA RANA

(860) 869-1707
ambika.rana@uconn.edu

EDUCATION

Hartford, CT **University of Connecticut** **Aug 2016 – Dec 2017(Expected)**

- M.S. in Business Analytics and Project Management. GPA: 4.0/4.0
- Coursework: Predictive Modeling, Data Analytics with R, Data Mining and Business Intelligence, Data Science with Python, Business Decision Modeling, Project Risk and Cost Management

Hamirpur, India **National Institute of Technology** **Aug 2008 – May 2012**

- B.Tech in Electronics and Communication Engineering. GPA: 8.3/10

SKILLS AND TECHNOLOGIES

- Techniques – Exploratory Data Analysis, Hypothesis testing, Regression analysis, Random forest, Boosting, Clustering, Market Basket Analysis, Linear Optimization
- Tools – R, SQL, Python (Pandas, ScikitLearn), SAS (Base), SAS JMP, Microsoft Excel, Tableau, UNIX
- Certifications – SAS Base programmer, Data Science with Python (Data Camp)

EMPLOYMENT

Analytics Intern **Merck & Co. Inc.** **Jun 2017 – Present**

- Built a Python framework on longitudinal patient data to analyze variation in patient abandonment and adherence with change in copay
- Implemented panel regression on physician sales to study promotional effectiveness of various channels
- Performed hierarchical clustering using market landscape to select geographies for a promotional pilot
- Studied impact of removing online Januvia vouchers on new patient starts and subsequently net revenue

Associate Consultant **ZS Associates** **Nov 2013 – Jul 2016**

AstraZeneca

- Led development of a $130k reporting solution for a portfolio of oncology drugs enabling dynamic creation of dashboards and real-time analysis of brand performance
- Analyzed patient data to evaluate compliance, persistence and assist client access team with actionable insights
- Designed KPIs to quantify the performance of specialty pharmacies for calculating their quarterly payouts
- Created dashboards and presentations to report weekly trends in patient and sales data to the leadership

MedImmune

- Automated the in-house BI tool using UNIX scripting and SQL procedures to analyze dispensing data from 80 pharmacies per week, thereby saving $90k in operational cost

ANALYTICS PROJECTS

- **Airbnb booking destination prediction** – Utilized feature engineering and boosted tree based hierarchical classification modeling to predict the booking destination of a customer with an accuracy of ~85%
- **Travelers claim prediction challenge** – Built a prediction model for claim amount using tweedie distribution and generalized linear model with a resulting Gini Index of 21.12, an improvement of 5% above the baseline
- **Analysis of patient readmission rates** – Analyzed the impact of HBA1C testing on the readmission rates of diabetic patients; obtained statistically significant results (p-value < 0.002) for patients with a primary diagnosis of diabetes and respiratory diseases
- **Non-linear regression –** Predicted the out of state tuition fee using Generalized Additive model (GAM), to illustrate its advantages over decision tree based models in interpretability, automation and regularization

ADDITIONAL EXPERIENCE AND AWARDS

- **Impact Recognition, ZS Associates** – Awarded for outstanding performance as a Technology Associate
- **Ensemble modeling challenge, Analytics Vidhya** – Ranked 4th out of 1,200 participants in an online challenge