DIMPLE BAPNA

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EDUCATION

NORTHEASTERN UNIVERSITY, Seattle, WA ***Aug 2019 - Jun 2021***

Candidate for Master of Science, Data Analytics Engineering

- Courses: Engineering Probability & Statistics, Database management & Database Design, Computation and Visualization for Analytics

UNIVERSITY OF MUMBAI, Mumbai, India ***Aug 2008 - Jun 2012***

Bachelor of Engineering, Computer Engineering

- Graduated with First-Class (Top 5%); GPA: 3.8

PROFESSIONAL EXPERIENCE

Senior Software Engineer,* DUCK CREEK TECHNOLOGIES,** Mumbai, India ***Aug 2016 - Jul 2018

- Led a team of 5 engineers to develop a customer tailored back-end policy system for GEICO using DuckCreek, C# and SQL.
- Automated the modification of ACH files as per the NACHA specifications, commonly used by Bank payments systems; reducing manual efforts by 90%.
- Served as point of communication to dive deep into client's project requirements and simplified the process for offshore resources.
- Designed instant notification system for GEICO customers reducing policy premium delays and policy lapse by 40%.
- Honored with "Instant Karma" for leading the team to deliver customer oriented high-quality solutions.

Software Engineer,* ACCENTURE SERVICES PVT LTD,** Mumbai, India ***Dec 2014 - Jul 2016

- Awarded "Rising Star" for developing automation solutions which improved the efficiency of the team
- Developed an application for production incident analysis, reducing the analysis time for unprocessed medical bills by 70%.
- Built a utility to notify field users in case of delay with Automatic EFT payments due to system issues to improve User experience.
- Developed an Electronic Payment Module for vendor claims; optimizing the payment processing time from 5 days to 1 day.
- Improved efficiency of payment system by more than 30% by optimizing the SQL queries triggered within the financial data suite.

Associate Software Engineer,* ACCENTURE SERVICES PVT LTD,** Mumbai, India ***Feb 2013 - Nov 2014

- Created a tool to eliminate duplicates and highlight pending bills; saving interest payment penalties of more than $2M for the client.
- Designed an application that resolved the discrepancy in the data sent to the accounting team, which eliminated the errors in financial reports generated by the end of the business day.
- Developed a tool to query data using a single command, simplifying the complex process to replace multiple individual queries; bringing down the testing efforts by more than 60%.

SKILLS

- ***Certifications:*** Microsoft Certified - Solutions Developer in Web Applications Development, Technology Specialist in Microsoft .NET Framework 4, and Technology Specialist in HTML5 with JavaScript and CSS3
- ***Languages:*** C++, Java, C#, Python- NLTK, NumPy, Pandas, SciPy, Seaborn, Matplotlib, Plotly and Cufflinks, R, PL/SQL
- ***Tools:*** Duck Creek Technology suite, HPQC, JIRA, Trace Monitor, TFS, .NET framework, Jupyter Notebook, R Studio.
- ***Database Applications***: PL/SQL Developer, MySQL, SQL Server, Postgres, NoSQL- MongoDB
- ***Machine Learning Algorithms:*** Decision Trees and Random Forests, Linear Regression, Logistic Regression, Neural Networks, K-Mean Clustering, SVM, NLP, Neural Nets and Deep Learning

PROJECTS

Food Bank Database System- SSMS, PL/SQL, Power BI

- Built a foodbank management system using SQL to simulate foodbank operations and visualized data using Power BI.
- Designed table-level constraints using Functions and enforced business rules using Triggers.

Statistical Analysis on Healthcare dataset from Kaggle- R

- Performed analysis using z-test, t-test, Chi-square goodness of fit test and constructed a 95% confidence interval for all the studies.

SPAM Detection Filter - Python

- Classified a message into ham or spam using NLP, and Multinomial Naïve Bayes classification theorem.

Recommender System - Python

- Developed a content-based recommendation system for movies.

Prediction of tumors - Python

- Implemented SVM on built in Breast Cancer Dataset that comes with SciKit learn, to predict whether a tumor is malign or benign.
- Tuned the model with a GridSearch to achieve 96% accuracy.

Analysis of Stock Prices during Financial Crisis- Python

- Analyzed some bank stock prices, and how did they progress during economic slowdowns.
- Used Pandas datareader to get the stock information of banks, and visualized the data using interactive plots.

911 Calls - Python

- Analyzed 911 calls of Montgomery County, and made a graphical representation to explain the data