AMRUT DESHPANDE

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OBJECTIVE

Passionate Industrial Statistics and Data Science Graduate Student with two years of experience seeking fulltime Opportunities in Data Science and Analytics.

EDUCATION

Master of Science in Industrial Engineering, Arizona State University- Graduate GPA 3.15/4.0* **May 2018**
Nano Degree in Data Analysis, Udacity **Feb 2018**
Bachelor of Engineering in Industrial Engineering and Management, Visveswaraya Tech. University, India- CGPA 3.65/4.0 **August 2014**

SKILLS and RECOGNITION

Programming/Packages: Python, R-Studio, VBA, SQL, Weka, Arena, Minitab, JMP, Design Expert, Matlab, SharePoint, Tecnix center, MS Office.
Certificates: Introduction to Python for Data Science- Data Camp, The Data Scientist's toolbox- Coursera.
Relevant Courses: Data Science for System Informatics, Statistical Machine Learning, Statistical Data Mining, Computational Statistics, Regression Analysis, Probability and Statistics, Information Systems, Deterministic Operations Research, Design of Experiments.
Leadership: Treasurer-Indian Students Association- ASU, (Treasurer and Events head)- Verve: JSSATEB, Vice President- St John's High School.

ACADEMIC PROJECTS – Data Analyst Nano Degree, Udacity

Wrangle and Analyze WeRateDogs Twitter data **Python, SQL, Tableau, Data Wrangling, Data Visualization**

- Gathered, assessed, cleaned, and analyzed the data visually and programmatically using Pandas and SQL to identify data quality and tidiness issues.
- Generated correlation maps to identify significant relationships between variables delivering valuable inference to the dataset.
- Performed statistical analysis plotting histogram and boxplots of most rated dog breeds and mean ratings of dog stages respectively.
- Strengthened the clarity of inference obtained through labelled visualization using Tableau.

Exploratory Data Analysis of White Wine data **R-Studio, Exploratory data analysis, Regression modeling**

- Performed preliminary exploration of the dataset by creating univariate plots to understand structure of individual variables.
- Generated bivariate and multivariate plots to examine the nature of relationships and interactions between variables.
- Drew valuable insights and confirmed significant relationship between variables of interest through bivariate and multivariate analysis.
- Built a linear regression model with good predictive power of identifying quality of white wine based on other features in dataset.

ACADEMIC PROJECTS – M.S in Industrial Engineering, Arizona State University

Course: Computational Statistics **R-Studio, Cross validation, KNN and Logistic Reg, Monte Carlo Methods, Bootstrapping, Random Sampling**

- Built a predictive model using KNN and logistic regression for a Body Mass Index data and performed 10-fold cross validation to evaluate the model.
- Evaluated the procedures to generate Bootstrap samples and its confidence intervals. Performed Permutation test as Test for Independence.
- Conducted Monte Carlo Estimation to estimate errors and confidence intervals. Generated random samples from multiple distributions.

Course: Statistical Data Mining **Weka, Data Classification, Machine learning algorithms**

- Worked on the classification of decision tree based on the error rates, pruning and ROC principle on the dataset.
- Built a classification model for the attributed data set based on machine learning algorithms by using supervised filters.
- Decision trees, Bayesian networks, Random forest, Boosting and Bagging algorithms were used to calculate the accuracy and balanced error rate of data.

Course: Information Systems **SQL, Workbench, Excel, VBA, XML, Data cleaning, Query, User forms, Supply chain**

- Building a Supply chain and Route optimization database system for Product shipment of an Automobile company.
- Generated User forms, Queries for different operations of the Supply chain system.

Course: Regression Analysis **R-Studio, Minitab 17, Regression models, Multicollinearity, Variable selection**

- Built a linearized Regression Model aiding the prediction of Computer Hardware Performance Evaluation.
- Analysed the Data set for Normality assumption, Best residual fit, Variable and best subset selection.

WORK EXPERIENCE

Business Strategist, Booksbeka.com, Bengaluru (08/2015-06/2016) **MS Excel, VBA, Business Development, Product Research and Strategy**

- Performed predictive analysis for customer base expansion using the review and sales database.
- Managed varied business development Programs and strategized different projects for sales up growth.

CAE Engineer-Design Intern, Fiat Chrysler Automobiles, Chennai (05/2015- 06/2016) **Excel, VBA, MS Office, Matlab, Hyperworks, ABAQUS, ANSA**

- Developed Automation deck for Flex plate durability load cases using VBA scripting to reduce the deck preparation time by an hour.
- Performed Durability and NVH Modeling for Powertrain sub system and analyzed the component level models for varied test cases and loads.
- Durability, Stress, Pin Insertion, Cap failure, loosening, Bending, Modal, mobility, Bolt slippage were the major analysis performed.
- Calculated the design parameters, Optimized the load application on the pulley hubs and tension on the of V-Belt of Front End Accessory Drive Layout

INTERNSHIPS

Production Planning Assistant, Bosch Limited, Bangalore, India (01/2014-05/2014) **Minitab, Tableau, Lean Mfg, Arena, Quality Control**

- Conducted Process optimization of Burr Removal Technique in the production of delivery valves of fuel injection pump.
- Performed Design of Experiments and concluded on introducing vibratory deburring process.
- Ensured that the obtained process could save the work time by $1/10^{th}$, reduce the work force to $1/3^{rd}$ and save the other miscellaneous work.

Industrial Engineering Intern, Volvo Const. Equipment, Bangalore, India (01/2013- 02/2013) **Facilities planning, Work Study, TQM, 5S, VPS**

- Work Standardization of Asphalt Compactor in increasing the assembly line efficiency to 85% from the existing 73%.
- Studied the Volvo manufacturing process by collecting and processing the information to develop a database for Process improvement.