DRUMIL JOSHI | RESUME

EDUCATION

Indiana University Bloomington   Bloomington, Indianapolis
Master of Science - Data Science; GPA: 4.0   *Aug 2022- Jun 2024*

Dwarkadas J Sanghvi College of Engineering   Mumbai, India
Bachelor of Engineering - Electronics and Telecommunication; GPA: 9.00   *Aug 2018- Jun 2022*

SKILLS SUMMARY

- **Programming**:   SQL, Tableau, R, MongoDB, Python(Numpy, Pandas, Scikit Learn, Seaborn, Azure ML Studio, Folium)
- **Machine Learning**:   Data Preprocessing, Regression Modeling, Random Forest, kNN Classifier, K-means Clustering, Feature Extraction (PCA, Factor Analysis), XGBoost, Support Vector Machine
- **Statistics**:   Inferential Statistics, Hypothesis Testing (A/B Testing), Regression Analysis.
- **Soft Skills**:   Team Building, Public Speaking , Team Player, Gardening, Reading, Travelling

RECENT EXPERIENCE

Dwarkadas J Sanghvi College of Engineering   Mumbai
Research Assistant Under Dr.Sunil H Karamchandani   *Aug 2021 -Jun 2022*

- Designed System for Monitoring the *Health of Developing Infants* from Cardiotocography Using *Statistical Machine Learning* , Achieved **precision** of **0.95** and **accuracy** of **0.92**.
- Strengthened **Customer Churn** prediciton system for Telecom start-up company by increasing **gini and kappa coefficient by 10 percent.**
- Co-Authored and published **14 Research Papers** on solving real-time problems related to Smart Energy Grid , **Renewable Energy** and irregularities in **Financial Industry** using Machine Learning.

TalentHome Solutions LLP   Mumbai
Junior Data Scientist (Intern)   *Jan 2021 -Jun 2021*

- Revised Real-Time Application of The **Augmented-Dickey Fuller Test** in ARIMA and SARIMAX to make the p-value less than 0.05 and increased **RMSE** Value by **10 Percent**,
- Analyzed Different Classification Algorithms and articulated an increase of **4 percent Accuracy** and devised increase in **precision** by **0.15**

SELECTED PROJECTS

Optimizing Bank's Financial NPAs Using Machine Learning : *Python, ML Azure Studio*

- Analyzed **BharatPe's Merchant Loan** Vending System and deviced loan default prediciton system design for Banks and NBFCs.
- Accumulated Inputs from **Industry** and Market Leaders on the software pipeline and Evaluated all the **ML Algorithms** on 6 Different **performance Metrics**.

Smart Water Management System : *Python, MIT App Inventor, Google Firebase*

- Interpreted live imminent data from a wireless **microcontroller**(ESP8266) and displayed it on Android Application developed on **MIT APP Inventor** to track day-to-day devices to the users
- Data Storage system was designed in Google **Firebase** and the system followed norms stated by **Government Of India**

Interactive Dashboard for UK Customer Bank Data : *Tableau*

- Compared the region wise average balance in-terms of its job classifications.Classified Region
- Created a global date range parameter. Include **interactive filters** for Job classifications and **Highlighters** for Region in the final dashboard

IBM Employee Attrition : *Python, Jupyter Environment*

- Interpreted Decision-Tree and **Random Forest** Algorithms Using Importance Plots and tuned **hyper-parameters** to imporve **Accuracy** by 5 **percent**.
- Created Interactive GUI Components in Jupyter notebooks using widgets.

SELECTED INTERNATIONAL PUBLICATIONS

- : Gopani, M., Trivedi, H., Lotia, H., **Joshi, D.** and Pal, R. *Computation of Amazon Stock Price for the next decade using ARIMA and SARIMAX Model.* **International Journal of Computer Science Engineering and Information Technology Research (Impact Factor - 11.1093**
- **Joshi,D.**: Parikh,A.,Mangla,R.,Sayed,F. and Karamchandani,D.S.*AI Based Nose for Trace of Churn in Assessment of Captive Customers.***Turkish Online Journal Of Qualitative Enquiry (Scopus Indexed)**
- **Joshi,D.**: Sayed,F.,Jain,H.,Bandi,Y.,and Karamchandani,D.S.*A Cloud Native Machine Learning based Approach for Detection and Impact of Cyclone and Hurricanes on Coastal Areas of Pacific and Atlantic Ocean.***Journal of University of Shanghai for Science and Technology Journal (Scopus Indexed)**
- : Sayed, F., **Joshi, D.**, Bhave, E., Chokshi, D. and Pal, R. *Projection of African Economy for the Next Decade using Linear Algebra and Applied Machine Learning.* **Design Engineering (Scopus Indexed)**

HONORS AND AWARDS

- Honored CopyRight by Government of India for Classification Of Human Child (FETUS) Health From Cardiotocographic Data Using Machine Learning Techniques(SW-15359/2022)
- Awarded Position of Manuscript Reviewer at International Journal of Electrical and Computer Engineering Systems.