

## EDUCATION

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| <b>Georgetown University</b><br><b>Graduate School of Arts and Sciences, Washington DC</b><br><i>Master of Science, Data Science and Analytics</i>                                 | August 2022 – May 2024<br>GPA (4/4)   |
| <b>Narsee Monjee Institute of Management Studies</b><br><b>Mukesh Patel School of Technology Management and Engineering, Mumbai</b><br><i>Bachelor of Technology, Data Science</i> | July 2017 – May 2021<br>CGPA (3.25/4) |

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## EXPERIENCE

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| <b>Center for Global Health Practice and Impact, Georgetown University, Washington, DC</b><br><i>Qualitative Research Analyst</i>  | January 2023 - Present   |
| <ul style="list-style-type: none"><li>Surveyed and analyzed transcripts of 150 interviews from locals in Kenya and Eswatini for Local Innovation Scaled Through Enterprise Networks (LISTEN) Process to gain insights for up-scaling treatments for HIV and AIDS.</li></ul>  |                          |
| <b>ICICI Bank, Mumbai, India</b><br><i>Deputy Manager (Data Science and Analytics)</i>   | July 2021 - April 2022   |
| <ul style="list-style-type: none"><li>Automated and Optimized the Society Ecosystem of Bank penetration using Python for faster computing times by 200%.</li><li>Improved the model to 82% accuracy while optimizing a Customer Lifetime Value model in Python to analyze different segments of Customers and the importance level to the Bank.</li><li>Facilitated in Data Pre-Processing and Cleaning of Private banking projects in Python as opposed to SQL and accelerated the process time by 50%.</li></ul> |                          |
| <b>Konsultera Solutions Pvt. Ltd., Mumbai, India</b><br><i>Machine Learning Intern</i>   | May 2020 - November 2020 |
| <ul style="list-style-type: none"><li>Built a custom Object detection model using Tensorflow for Social Distancing on Python and attained an accuracy of 81%.</li><li>Co-ordinated in optimizing the Law firm database of 2500 cases using Natural Language Processing techniques and Spacy.</li><li>Strengthened the development of live projects in the machine learning category for different major companies as required.</li></ul>   |                          |

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## PROJECTS

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| <b>Thrombosis Diagnosis Analysis</b>  | February 2023 – March 2023  |
| <ul style="list-style-type: none"><li>Analyzed the medical records and demographic information of the patients with collagen disease, Thrombosis, to get insights about various alternatives that should be taken into consideration while performing basic tests for Thrombosis.</li><li>Various techniques for Data Munging were applied to handle missing values and Exploratory Data Analysis was used to get the insights.</li></ul>   |                             |
| <b>Formula One Analysis of Historical Data</b>  | August 2022 – November 2022 |
| Link: <a href="https://ramdayal.georgetown.domains/501-project-website/pages/index.html">https://ramdayal.georgetown.domains/501-project-website/pages/index.html</a> <ul style="list-style-type: none"><li>Used multiple Machine Learning algorithms such as Naïve Bayes, Decision Tree and Support Vector Machine to predict the position of a driver based on their history and achieved accuracies ranging from 81% - 98%.</li><li>Extracted the data using various Formula One APIs and performed Pre-processing techniques on the data.</li></ul> |                             |
| <b>Football Penalty Direction Predictor using Pose Estimation and Deep Learning</b>   | December 2020 – April 2021  |
| <ul style="list-style-type: none"><li>Created a deep learning model using the key-points (joints) of the shooter to predict the direction of the ball before taking the shot and achieved the accuracy of 73%.</li><li>Implemented the OpenPose Pose estimation model to get the key-points of 3000 penalty shooters.</li></ul>   |                             |
| <b>Facial Attribute Detection</b>   | February 2020 - April 2020  |
| <ul style="list-style-type: none"><li>Tuned the Resnet50 pre-trained model on a custom data-set of faces with over 40 facial attributes with the help of Haar Cascades, FastAI and Pytorch.</li><li>Decreased the processing by 50% with a higher accuracy of 91% with the help of Fast AI.</li></ul>   |                             |
| <b>Emotion Detection from Speech</b>  | February 2020 - April 2020  |
| <ul style="list-style-type: none"><li>Classified voice notes into emotions such as - Angry, Happy, Sad and so on using Neural Networks and 2 Sound features - Chroma and MFCC to get 95% accuracy.</li></ul>  |                             |

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## TECHNICAL SKILLS

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| <b>Programming</b>        | : Python, R, SQL  |
| <b>Software Package</b>   | : Pandas, MySQL, Quarto, Numpy, D3.js, Flex-dashboard, Plotly, Pytorch, Tensorflow, Dplyr, Matplotlib, Seaborn, Ggplot2                 |
| <b>Tools/Technologies</b> | : Git, Prodigy, Vertica, Power BI, Oracle XE, Vertica, Adobe Premiere Pro, Cloudera QuickStartVM, Jupyter, Tesseract, R studio, Tableau |
| <b>Concepts:</b>          | : Data Extraction, Data Munging, Data Visualization, Machine Learning, Deep Learning, Computer Vision, Natural Language Processing      |

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