**Email** : rnagara1@mtu.edu **Rajath Nagaraj Contact no**: **(906)-370-7098**

**LinkedIn**: <https://www.linkedin.com/in/rajath-nagaraj/> **Portfolio**: <https://rajat1995.app>

Data Science graduate student with 2yrs of experience in field of data services and python development. I am focusing on Machine Learning, Deep Learning and Software development. I have been certified with AWS cloud and Tableau Desktop. I am Interested in solving business problems using data driven approach.

**EDUCATION**

**MS in Data Science** 3.8/4.0 | Michigan Technological University | Houghton, MI **| Expected April 2021.**

**Bachelor of Engineering** 3.5/4.0 **|** Visvesvaraya Technological University | Bangalore, India **| 2013-2017.**

**Work Experience:**

**State Auto Insurance Companies : Digital Lab IT intern Aug 2020 – Dec 2020.**

* Development of applications to create policy quote for home and auto insurance, utilizing Python and React JS as programming languages. Implementing the code via Amazon Workspace and EC2.
* Designing the feasibility for implementing Machine learning algorithms for quoting the policies.

**Infosys Limited : Systems Engineer American Family Insurance Data Lake Project Jan 2018 – Jul 19**

* Development of Python based tools for data quality check from on-premise Hadoop servers to AWS and thereby significantly reducing time for validation to 1/3rd of usual time.
* Utilizing AWS EMR service to access the large data from s3 and create datasets to support Analytics team. Worked on Dynamo DB extracting the JSON and parsing them to CSV.
* Analyzing the usability of data by performing Data Profiling using python and spark data frames.
* Developed a tool to review the data migrated to snowflake cloud, the tool achieved a speed to validate 100k records under 4mins.
* Creating project report on day to day basis using Tableau, Microsoft Excel and presenting the report to the client product owner team.

**Technical and Computer Skills**

* **Programming Languages and Tools –** Python, R-Prog, HTML, C; Jupyter notebook and visual studio
* **Big Data Technologies** – Hadoop, Hive, Sqoop.
* **Cloud Platforms** – AWS (Dynamo DB, Athena, S3, EMR, EC2), Google cloud.
* **Data Warehousing** – Oracle DB, MYSQL, Postgre , BigData, hive and DB2.
* **Data Visualization –** Tableau, Flourish Studio, Matplotlib, Seaborn, Plotly, Tableau.
* **Data Preprocessing** – Informatica, Pandas, NumPy, Beautiful Soup, Twitter API Packages.
* **Machine Learning –** Supervised Learning, Unsupervised Learning, Scikit Learn, NLTK, Neural Network – TensorFlow and Keras.

**Projects -** <https://github.com/Rajath1995> | <https://medium.com/@rnagara1> |

**Machine Learning:**

* Built Linear Regression, Logistic Regression, K-means without help of libraries.
* Programmed a classifier using TensorFlow Keras to classify images and further increased the accuracy to 90%+ with help of image augmentation and transfer learning with MobileNet and VGG16.
* Implemented a machine learning pipeline consisting of NLP and multioutput classifier to segregate the disaster response messages during natural calamities and built a UI to provide inputs.
* Implemented GAN on the Image dataset and tried to mimic the images using generator. The application of GAN is typically in replace the imperfection in the images.
* Prediction of customer behavior for a product based on similar customer base, the project involved conversion of unsupervised learning to supervised learning problem.

**Data Mining:** <https://census5.herokuapp.com/>

* Analyzing insights and patterns from various datasets ex: Airbnb Seattle, Census, Music, IRIS. Implemented core data mining algorithms like Random Forest, SVM, Decision Trees, clustering techniques, association rule, principal component analysis. Implemented association rule for Instacart dataset. Categorized hotel reviews using Naïve Bayes algorithm and utilized NLP to process the text reviews.

**Web Development and Data Visualization Projects:** <https://public.tableau.com/profile/rajath.nag.nagaraj>

* Created visually attractive and simple to understand visualizations for MakeoverMonday competitions.
* Developed my personal website using HTML and CSS (bootstrap4) and launched it on google domain (<https://rajat1995.app>).
* Created various web applications for ML projects using StreamLite, Plotly and HTML web pages.