

Bharath Chandran-

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SUMMARY

Having 4.5 years of experience as Test Engineer in Automotive Industries along with hands on experience in Machine Learning, Data Analytics, Data Visualization and Dashboards. My interests include ML, Deep Learning and NLP.

SKILLS

Machine Learning: Logistic and Linear Regression, Decision Tree, Random Forest, Boosting, SVM, PCA, KNN, K-means Clusters, DBSCAN Clusters, Hierarchical clusters.	Python Libraries: NumPy, Pandas, Matplotlib, Sklearn, scikit-learn, Seaborn Deep Learning: TensorFlow, ANN, CNN, Keras	NLP: Spacy, Stanza, NLTK Data Mining: Web Scraping using Scrapy Programming Languages: Python, SQL Application: Microsoft Power BI, Excel, Mini-tab Tools: PyCharm, Jupyter Notebook, Google Colab
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WORK EXPERIENCE

Product Test Engineer – (Data Analytics & ML)

Molex India Pvt. Ltd

Aug 2020 - Present

Project: Cable Approval Validation

Predict the passing criteria of cable approval by cross sectioning test results using a machine learning algorithm.

- **Retrieved Data** from old test reports which was in PDF then, converted into pandas dataframe using **tubula-py** and stored as a CSV file.
- Data Visualization done to get proper insights from the data using **Seaborn and Matplotlib**.
- **Missing values** treated using match function and **interpolate** techniques implementing domain expertise.
- **Minmax Scaler** used to transform the features on a scale of 0 to 1,
- Performed various algorithms used in **supervised learning** such as (Logistic regression, Decision Tree, Random Forest, KNN, Naive Bayes, SVM Kernel)
- **Hyperparameter** tuning carried out on each machine-learning algorithm to find an optimal combination and to minimize a predefined loss function to give better results. Specifically **Stratified K-Fold cross-validation** was used to find a range of Model Accuracy.
- Executed **Confusion Matrix** majorly to concentrate on reducing '**Type II error**' and listed Recall, Precision, F score and ROC Curve.
- Launching this project results in a **drastic change** in saving test engineer time **3 hours a day**.
- The R&D cost incurred in this product testing has been brought down by **28% per cent**.

Visualizing Test Concepts in Power BI:

- Performed numerous Mechanical and Electrical tests on Molex connectors to interpret the results using **Power BI**.
- **Visualizing** interlinked graphs helping to decode the test result in various stages, thus helps to analyze the **root cause** much efficient manner.

Assistance Test Engineer

TUV Rheinland India Pvt. Ltd

Dec 2018 – Jul 2020

- **Develop test programs** and write test plans to validate product performance.
- Analyze and track defects identified in testing and assist in developing **test protocols** to anticipate product performance.
- Monitor and track the status of test defects until closed and prepare **failure analysis reports** and provide corrective actions.

Junior Test Engineer

SKC Environ Lab Pvt. Ltd

Sep 2017 – Nov 2018

- Pioneer in Designing and analyzing the fixture for various tests using **Catia V5** and preparation of test reports by collecting the measured data and validating the results.

CERTIFICATION

- Machine Learning AZ™: Hands-on Python & R In Data Science, Udemy
- **HackerRank**: - [Link](#)
 - Secured HackerRank **5-star Gold** level rating in **Python**
 - Also, Secured HackerRank 2-star Bronze level rating in SQL
- **Kaggle Competition** - [Link](#)

EDUCATION

Master of Business Administration

University of Madras, Chennai

Jun 2019 – Sept 2021

Secured **1st Class** with distinction - **CGPA 8.2**

B. TECH Mechanical Engineering

SRM Institute of Science & Technology (Deemed University), Chennai

May 2013 – June 2017

Secured **1st Class** with distinction - **CGPA 8.77**