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| Mohanraj Muthusamy | |  |  | | --- | --- | | 7/305-C, Aero Nagar, Sulur, Coimbatore |  | | 8754857124 |  | | mohan51525@gmail.com |  | |  |  | |  |  | |

An engrossed person to work in the field of Machine Learning by exploring and developing various models based on Algorithms. Research aspirant in the field of Deep Learning, as it emerges to be one of the areas “to be explored”. Willing to end up in a firm which has challenging tasks and resulting in abundance of knowledge.

# Skills

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| --- | --- |
| * Statistics * Predictive Modeling * Machine Learning * Artificial Intelligence * Classification * Deep Learning (Image Analytics) | * R * Python * SQL * Tableau & Power BI * KNIME * Microsoft Azure ML |

# Experience

### Cognizant Technology & Solutions [Sep-2013 – NOV-2019]

## Associate- Software Testing, AI & ML

* Professional expertise in Functional testing on the Web Service, Mainframe Applications and Test Management Tool with an experience of 6.1 years
* Worked in POC related to Image analytics using Computer Vision (OpenCV)
* Domain knowledge in Healthcare and Insurance related projects. Expert level skill in Excel, AS400, FACETS, TABLEAU, KNIME and ALM
* Responsible for designing, testing and supporting web-based applications based on established business requirements and specifications in order to deliver the application without any issues
* Evaluating the Test result documents in support of project requirements within the assigned team members and provide guidance for the same
* Preparation on Project Estimation, Test Strategy Preparation and Requirement Quality Reviews
* Status Reports on daily basis for Test Execution to demonstrate observations and clearly communicate recommendations to senior management & client
* Worked in Waterfall and Agile Methodology

**Roles and Responsibilities:**

* Test Lead at Offshore – coordinating team of 5-6 members
* Planning and assigning daily task for team members
* Understanding the Business requirements
* Preparing Test Estimation and Test Strategy
* Preparation/Review of Test Scenario’s/ Test Cases
* Walkthrough of test scenarios with Onsite coordinator
* Executing Test Cases and Tracking the defects.
* Effectively using ALM or DevOps for tracking the Execution progress
* Preparing and sharing weekly status reports using Tableau with clients
* Creating SQL Query by different methods to get the already existing Test data
* Participating in defect triage & POD calls
* Test Result Document will be reviewed & attached to ALM or DevOps
* Final Walkthrough of the Test Results will be given to Client with respective POD members

# Education

### **Great Lakes Institute of Management** [March 2019 - 2020]

## PGP (BABI)

Course overall percentage is 87%, Final coursework was on “Study of Retail In-Store Customer Behavior and Sales Prediction using Image & Video Analytics”

**Briefing Coursework -** In Retail store, tracking the Customer Behavior using video analytics, Predict the daily sale based on the customer time spent in different zones, providing insights and business solutions.

“*For Image & Video Analytics, the data obtained in the form of video was converted into required format + Converting the video into image based on frames per second (Using Python) + Segmenting the customer using their unique features (Using CNN) + Saving the details in SQLite database. Based on this, time spent by the customers in different zones were identified and finally the data was predicted for the stock maintenance and sales of the product”*

**Skills and Tools –** Python, Tensorflow, OpenCV, CNN, Transfer Learning, SQLite

### **PSG College of Technology** [May 2013]

## ME (Energy Engineering)

Completed with 7.5 GPA, Final coursework was done on “d-Space based Reactive power compensation for Grid connected Wind Energy conversion system using FACTS device”. In parallel to this, worked as an Intern researcher in Bosch for “Identifying the best efficient Solar Panel developed based on various materials”

### **Karunya University** [MAY 2011]

## BE (EEE) /

Completed with 8.1 CGPA, Final coursework was done on “Modeling of Wind Turbine Power Curve” the same was published in IEEE.

# Academic Projects (PGP-BABI)

**Project 1:** **Evaluated the impact of a sales incentive scheme at Titan Insurance Company**

**Description**: In this Hypothesis Testing and visualization were used to evaluate the success of a new sales incentive payment scheme at Titan Insurance Company

**Skills and Tools:** Hypothesis Testing, Data Visualization, Statistical Inference

**Project 2:** **Visualizing House Sales for Boston Real Estate**

**Description**: This project explored the art of problem-solving with the aid of visual analytics to identify properties of sale and factors affecting it. Tableau’s data visualization tools were used to create interactive dashboards to uncover hidden insights for sellers of the properties as well as prospective buyers.

**Skills and Tools:** Data Visualization, Dashboard, Business Intelligence

**Project 3:** **Visualizing Art House Sales data using Tableau**

**Description**: This project explored the art of problem-solving with the aid of visual analytics. Tableau’s data visualization tools were used to create interactive dashboards to uncover hidden insights to identify the performance of an Art Auction House in terms of profitability and sales.

**Skills and Tools:** Data Visualization, Dashboard, Business Intelligence

**Project 4:** **Factor Analysis of consumer perception on Cereal Brands**

**Description**: This project uses Factor Analysis to evaluate and identify the most significant attributes that contribute towards the consumer perception of the different cereal brands.

**Skills and Tools:** Factor Analysis

**Project 5:** **Neural Network model on Employee Attrition**

**Description**: The project investigates the factors that cause employee attrition in organizations. An employee attrition model was built using moderate neural network model and random forest. After generating common performance parameters for both the models, an ensemble model was created that identified the cause of employee attrition.

**Skills and Tools:** Neural Network, Data Mining, CART

**Project 6:** **Built a logistic regression model to predict customer churn in the Telecom industry**

**Description**: The primary objective was to investigate the parameters contributing for customer churn (attrition) in the Telecom Industry. A Logistic Regression Model was developed and validated with test data to predict customer churn.

**Skills and Tools:** Logistic Regression, Predictive Modeling

**Project 7:** **Built a forecasting model to predict monthly sales for the next 2 years**

**Description**: Analyzed historical sales data of a company. Developed multiple forecast models (Winter-Holts, ARIMA) and recommended the optimum one to predict sales for the next 2 years.

**Skills and Tools:** ARIMA, Winter-Holt, Time Series Analysis

**Project 8:** **Performed Brand perception analysis using text mining on twitter data**

**Description**: Brand perception of a multi-national organization was analyzed by extracting Twitter mentions for the brand and conducting text mining (Correlation, Frequency, Topic Modelling and Sentiment Analysis) on it.

**Skills and Tools:** Text Mining, Social Media Analytics, Sentiment Analysis

**Project 9:** **Built a Machine Learning model to predict the choice of transport for a company**

**Description**: Analyzed the employee database of a firm with around 500 employees. Built a Machine learning model that best explained the employee's decision to use a specific medium as his/her main means of transport.

**Skills and Tools:** Model Building, Logistic Regression, Machine Learning