

Shanmugavel S

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🌐 Shanmugavel.S Portfolio

PROFILE SUMMARY

Worked in ITC limited as Technical Executive for 5 years and 4 months, involved in Machine learning projects, Creating PowerBI dashboards, Machine maintenance, Shift handling , Spare Management. Looking forward to move in data science field in full time role to gain industry experience and eagerly waiting to learn new technology to improve my skill sets.

WORK EXPERIENCE

Brila Opus paints Internships - 7 months

Aug 2025 - Feb 2026

Data Analyst

Bangalore , Karnataka

Associates mapping and performance analysis

| *Project 1*

- Analysis the performance of associates by region, teams and target achievement
- **Problem faced**
- Region wise active count is **around 30 %** only Kerala region performed well.
- Across 11 months of data every associate falls **under less than 500 Lr** but at year end performance is good.
- Associate changeover in all regions **approx 15-20 %** falls under good rating other lagging.
- **Solution**
- Associate mapping analyzed all region every region associate **performance falls under slap of Average and Below average so they need to be moved to the next slap** then they can moved between teams inside the regions.
- 4L liters target achievement at present from the south region mostly **around 60%** achieved from all region but expect TN North is lagging. Suggestion for TN North region ASM to keep mid review with associates and see performance of individual and address them by giving inputs
- From the insights found most of the associates are falling under below-average category so first all region ASM needs to concentrate to improve the performance of their team members to other category once that achieved then they can find lower performer in the team region wise then they can switch between other teams or training can be given to those members
- Technologies used in this project Excel — Power point — ML concepts in Excel — Create dashboard in Excel

ITC Limited - 1 year

Jan 2023 - Dec 2023

Data Analyst

Pune, Maharashtra

- Creating Dashboard in PowerBI based on requirements
- Built Machine learning project to predict the project life cycle and maintenance time

ITC Limited - 4 years and 4 months

Sept 2018 - Dec 2022

Technical Executive

Pune, Maharashtra

- Apply my expertise in issue handling and maintenance to ensure smooth operation of machines during shifts, **minimizing downtime by 20 %** every month and optimizing production output.
- Demonstrate my proficiency in troubleshooting, problem solving and time management to promptly **resolve machine related issues 10 %** every month and minimize disruptions to production.
- Proactively address safety concerns and contribute to maintaining a safe working environment by closing safety points and effectively managing spare inventories **every 3 months**.
- Continuously monitor and assess quality of the products, conducting risk assessments of market complaints and implementing necessary improvements to meet customer expectations.
- Coordinate **brand change activities 70 % every shift** and ensure uninterrupted resumption of quality data in central system.
- Take regular **backups every 3 months** PLC programs and parameters ensuring data security and **every 6 months change machine passwords** to maintain system integrity.
- Perform inspections of all OCR cameras associated with technology machines in every shift, ensuring their proper functioning and accuracy and performing **shock test 1 month once**.

EDUCATION

Indian Institute of Technology Madras (IITM)

BS Degree in Data Science and Applications

- Cumulative GPA : **6.46**

Madras, Tamil Nadu

Jan 2024 – Pursuing currently

Nettur Technical Training Foundation (NTTF)

Diploma in Mechatronics

- Cumulative GPA : **8.5**

Bangalore, Karnataka

Jun 2015 – Jun 2018

Maharishi Vidya Mandir (MVM)

Computer Science

- Cumulative Percentage : **75 %**

Hosur, Tamil Nadu

Jun 2013 – Apr 2015

COURSE

Guvi

IITM Advance Professional Programming with Master data science program

- Cumulative Percentage : **70 %**
- Relevant Coursework: Python — Data Visualization — MongoDB — MySQL — PowerBI — Tableau — Machine Learning — Deep Learning — Natural Processing Language — Microsoft Excel — Pandas — Numpy — PyTorch — AWS

Madras, Tamil Nadu

Jan 2023 - Jul 2023

TECHNICAL SKILLS

- **Programming Languages** : Python — PLC programming
- **Data Science Technologies** : MySQL — MongoDB — Power BI — Tableau — Data Visualization — Plotly — Machine Learning — Deep Learning — Microsoft PowerPoint — Microsoft Excel — Microsoft Word — Natural Language Processing — Data Analysis — Prediction — Pandas — Numpy — PyTorch — AWS
- **Soft Skills** : Communications Skills — Ability to work in a team — Ability to work under pressure — Time Management — Trouble shooting

PROJECTS

ITC Limited

| *Sept 2018 - Dec 2023*

- Total Projects - 11 projects

Machine equipment Data Analysis and Prediction

| *Project 1*

- Analysis the performance of the heater by using the machine live data and build the Machine learning model
- Data collection from the centralize data application for machine heater live data, Data storage used SQL server management, ML model build by using machine heater live data to predict the heater maintenance time and trained the model to analyses the product life cycle based on the temperature behavior of the heater in the machine **prediction accuracy is 90 %**
- By this model we can able to plan the maintenance activity and look after the performance of the heater
- Technologies used in this project Python — SQL — Machine Learning algorithms

Production performance analyzer

| *Project 2*

- To built the dashboard for the production performance analysis across of all units
- Data collection from central application of all the units production data, Store the data in excel format, created the dashboard to analysis the performance of all the units and **data will be refresh weekly**
- By this we can able to analysis the production performance in visualize manner before it was in table format or by verbal communication
- Technologies used in this project Excel — PowerBI — EDA — Python

Guvi

| *Jan 2023 - Jul 2023*

- Total Projects - 8 projects

Customer Conversation Prediction

| *Project 1*

- Historical marketing data of the insurance company data is given by using previous data ML model is build to predict a client will subscribe to insurance

- By collecting the historical marketing data build a ML model and train the model with a interactive graph that can predict a client will subscribe the insurance or not and F1 score is used to evaluate the performance of the model **final model XGBoost has AUROC 92 % and Accuracy 87 %.**
- Technologies used in this project Python — Visual Studio — Library required in IDE

Singapore resale flat price prediction

| *Project 2*

- Predictive Model Development: Build a machine learning model to predict resale prices of Singapore flats, using historical data on transactions from 1990 to present. Model accuracy will be evaluated with metrics such as **MAE, MSE, RMSE, and R² Score.**
- Feature Engineering and Training: Extract and preprocess features like town, flat type, floor area, storey range, and lease date to improve prediction accuracy. **Train a suitable regression model on 70-80% of the dataset for reliable predictions.**
- Web Application and Deployment: Create a Streamlit app allowing users to input flat details and view resale price predictions. Deploy the app on Render for public access, ensuring thorough testing for functional accuracy.
- Technologies used in this project Python — Visual Studio — Library required in IDE

Phonepe Pulse Data Visualization and Exploration

| *Project 3*

- Live Geo visualization dashboard with information displayed about Phonepe pulse with interactive manner and data will be stored in MySQL database for efficient retrieval of data and dashboard will be dynamically updated the latest data.
- Data extraction by cloning GitHub repository and store data in CSV **data of 14000+ rows and 15+ columns** data transformation by data cleaning, handling missing data, and transforming for data analysis and visualization, storing the collected data in MySQL database, Dashboard creation and graphs in streamlit, retrieval of data from MySQL and update in dashboard and deployment of the app in the streamlit
- Technologies used in this project Streamlit — GitHub clone — Python — Visual Studio — Pandas — MySQL — Plotly