



PAVITHRA COIMBATORE SAINATH  
Google Analytics certified (Completion ID: 151247670) | AWS certified  
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## EXPERIENCE – 8 years of programming and Data science expertise

### EssenceMediaCom - GroupM, Singapore

Nov 2021 - Present

#### Associate Director

May 2023 - Present

- Translated business opportunities into actionable analytics requirements and recommended solutions, contributing to winning a significant pitch for a food and delivery client in the APJ region through **source-of-growth analysis**
- Performed Marketing mix model for get better **ROI** using **Log linear regression addressing negative inequality constraints** using GCP **vertex AI** workbench, and provided insights to business leaders to help in effective campaign planning
- Played a key role in delivering a crucial global initiative project focused on creative brand lift, by implementing **BLIP and CLIP models** on ML pipelines
- Modelled pre-flight check analysis using **Random forest regressor** to determine the features that contribute to higher stat sig lifts in different digital touch points
- Spearheaded a creative dashboard project aimed at showcasing key attributes that influence the media performance of creatives, leveraging **PowerBI, Python**, and **GCP** storage
- Developed a standardized data source for over 77,000 creatives utilizing **OpenCV vision capture**, leveraging scaling through parallelization and multithreading. This scalable solution serves as a pivotal data source for creative testing, facilitating seamless integration and analysis.
- Implemented **A/B testing** to measure the performance of creative assets within a marketing campaign, providing data-driven insights that empowered the planning team to make informed decisions and optimize campaign strategies for enhanced **ROI** and user engagement

#### Senior Analytics Manager

Nov 2021 - May 2023

- Built and evaluated the performance of brand and non-brand paid search keywords using **Python, Google BigQuery** and **looker studio**
- Built ensembled **XGBoost classifier** models to predict conversion rate using the features of video creatives
- Conceptualized, Designed and implemented Martech Diagnostic system using **GCP Cloud Functions, Adverity and Data Studio** to monitor campaigns and traffic patterns
- Built creative based **reach and frequency analysis** dashboard to define the campaign's optimal number of creatives for efficient content management
- Evangelized & built **text-based ML models** to digitize purchase orders and automated the mundane process using **GCP** Cloud, thereby saving 1000-man hours

### Singapore Exchange (SGX), Singapore

May 2019 - Jul 2020

#### Data Analyst

Jan 2020 - Jul 2020

- Utilized foundational analysis techniques to forecast market behavior for options over futures to make more informed decisions using **Tableau**, and KDB+ q programming
- Developed a Knowledge Management System leveraging Text Mining techniques in **Python** and **AWS** cloud storage to create and manage metadata tables, facilitating seamless integration with downstream systems for enhanced data accessibility and utilization
- Conducted in-depth analysis and generated daily reports on the trends of the Securities Market, including open, midday, close auction, and end-of-day trade activities at the market level, providing valuable insights for decision-making and strategic planning using **Tableau**
- Constructed a Text Classification model for the analysis of trade documents for internal use, employing Fasttext embeddings and an **LSTM classifier**, enhancing document categorization accuracy and streamlining information retrieval processes

#### Internship

May 2019 - Nov 2019

- Analyzed and reported daily trend of **Derivatives Market** for the past 12-month period
- Measured the Volume change to the Expiry months of various products in the Derivatives Market
- Played a pivotal role in delivering an analytics solution that seamlessly integrated with SGX's Titan Hub product launch website, contributing to the successful launch and ensuring data-driven insights for users
- Created business dashboards showcasing the product level volume changes in Derivatives Market using Advanced **Tableau** Techniques like Actions and parameterized values

- Developed bespoke KPI dashboard using **Python** and **Tableau**, resulting in a 10% increase in production output, **enhancing manufacturing standards** for stakeholders including Volkswagen and Ferrari.
- Implemented A/B testing to compare the effectiveness of the new processes on clients who adopted them versus stakeholders who did not, providing actionable insights for further optimization.
- Applied Interactive **Explanatory data analysis** to help strategic initiatives, roadmaps, and process models for continuous process improvement for **Electric Power Steering** units
- Implemented automated reporting systems using **SQL**, **Python** and **Dash**, reducing manual reporting efforts by 50% and enabling stakeholders to prioritize strategic initiatives, benefiting OEMs in their pursuit of excellence.
- Transitioned from a **data analyst to a process leader** by delivering key and timely reports to stakeholders, enabling the swift implementation of new process changes.

- Created product **data** warehouse application using **Objective-C** and **Oracle 12c for Apple**
- Effectively stored and retrieved confidential Apple product information using **SQL** queries, and **PL/SQL** packages

**Product Classification on E-commerce Catalog**

- Developed a **Machine Learning Model** using **Text Classification** techniques to classify the Shopee's products with an accuracy of **99.8%** at category level and **83%** at the sub-category level
- Ensembled different Text Classification models to improve the overall accuracy of the model to **85%** at the sub-category level
- Developed an **Image processing model** using **LeNet-5** and compared the **prediction results** with the prior text classification model

**Dengue Outbreak Analysis**

- Studied Dengue Outbreak in Taiwan over the last 20-year Period using **Spatial-Temporal Analysis** and Imported dengue case analysis from other countries
- Developed a generalized [R shiny application](#) to adopt other countries Dengue analysis

**Customer Analysis using Customer Shopping Behavior**

- Build personalized recommendation based on the user clicks using the **USER-USER Similarity Collaborative filtering** in **Excel**
- Performed RFM segmentation and analyzed the customer purchase behavior using **Market-Basket Analysis (Apriori)** and created Personalized recommendation system using **Python** and **SAS Enterprise Miner**

**Exploratory Analysis using Tableau**

- Conducted [Exploratory Cohort Analysis](#) by Age, Sex and Region for the population data of Singapore to help the Singapore two planning
- Analyzed and created a detailed report on the VAST Challenge 2019 dataset using [Radiation Spread Analysis and Anomaly Detection](#)

**Skills**

- **Technical Skills** - Python, Tableau, SQL, JavaScript, R, Oracle 12C, MySQL, Java
- **Tools** - Anaconda Navigator, Spyder, Jupyter Notebook, AWS Data and ML tools, GCP data and ML suite, SAS Enterprise Miner, Tableau Prep Builder, Tableau Desktop & Server, JMP Pro 14, Adobe analytics, Google campaign manager, Google suite, GA 360/Google analytics 4, Microsoft Office suite,
- **Python Packages** - Pandas, NumPy, sklearn, Keras, Fasttext, NLTK, seaborn, Dash, Matplotlib, Plotly, Tensorflow, opencv, google vision,
- **Data Viz Tools** - Tableau Desktop & Server, Power BI, Google data studio, AWS quick sight, R shiny, Dash

**Education****Master of IT in Business [Analytics] (CGPA - 3.38/4)**

- Specialized in Applied Machine Learning and Visual Analytics

**Bachelor of Technology in Information Technology (CGPA - 8.34/10)**

- Specialized in Database Management Systems

## Brands worked



## Few client and stakeholder appreciations

From: [redacted]@bosch.com  
Sent: Monday, October 24, 2016 12:37 AM  
To: Pavithra Coimbatore Sainath (RBEI/ETC1) <Pavithra.CoimbatoreSainath@in.bosch.com>  
Subject: Feedback

Dear Pavithra,

I hope you had a safe trip home.

I would like to thank you for your stay in Germany – during the training both Maik and me were excited, how quick you were able to implement the new tasks, use new tools and how big your progress was. You were did not finish only the EPG related task being planned for this week but also were able to clarify a lot of items regarding CPC.

It is a pleasure for me to work with you.

Mit freundlichen Grüßen / Best regards

[redacted]  
Manager Engineering Process Group  
Geschäftsfeld PKW / Business Field Pass. Cars

**Robert Bosch Automotive Steering GmbH**  
Richard-Bullinger-Str. 77  
D-73527 Schwäbisch Gmünd

### Feedback for Pavithra on CMD dashboard

SM [redacted]@Dell.com>

Reply Reply All Forward ...  
Wed 10/5/2023 5:54 pm

Hi Krishna,

I would like to give my feedback for Pavithra on building CMD dashboard. She has done a fabulous job to get this dashboard out, which will help to check our campaign performance on a weekly basis. She has paid utmost attention to the data and made sure all the formulas and calculations are correct and has been populated timely. She also collaborate well with the MOSS team for any clarification required to build the dashboard. Thanks for all your help and patience, Pavithra. Glad to work with you on this project and hope we continue our partnership in other projects as well.

Regards

[redacted]  
Marketing Programs and Digital analytics lead  
Dell Technologies | APJ Integrated Marketing

### Re: Frames for 77K video assets



Start your reply all with: Thank you! Thank you so much! Thank you. I appreciate that. Feedback

This is awesome Pavithra and will get this looked into. Huge well done!



thank you. For the short turnaround (and late nights / early mornings) I think this was a great effort.

for reference - here is what was shared with the client



[Taiwan Dengue Analysis](#)  
[\*R shiny Dashboard\*](#)



[SG Population Study](#)  
[\*Tableau Dashboard\*](#)



[VAST Challenge](#)  
[\*Tableau Dashboard\*](#)