

EZHILAN CHINNASAMY

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SUMMARY

Aspiring Data Analyst with diverse experience in Business Analytics, Machine Learning, and Software Development. Proficient in collecting, cleaning, analyzing, and presenting business insights from large datasets using SQL, Python, Excel, PowerBI, and Tableau.

SKILLS

Programming and Databases: Python, R, SQL (MySQL, MongoDB, PostgreSQL, SQL Server), JavaScript, jQuery, HTML, CSS, Excel VBA

Analytics Tools: Adobe Analytics, Google Analytics, Tableau, PowerBI, Advanced Excel (Pivot table, LOOKUP), Alteryx

Big Data and Cloud Services: ETL, Hadoop, PySpark, Keras, Apache Kafka, MapReduce, Git, Linux, Azure, Salesforce, Google Colab

Statistical Models (ML): Linear modeling, regression models, Clustering, predictive and prescriptive modeling, Time Series forecasting

Interpersonal skills: Ownership, Decision-Making, Critical-Thinking, Problem-Solving, Team Player, Leadership, Communication, Presentation

WORK EXPERIENCE

Pay with Spire, Data Analyst (Looker Studio, MS SQL, Excel)

Oct 2024 – present

- Automated report generation using Python and SQL, reducing manual effort by 30% and accelerating data delivery timelines.
- Designed and deployed dynamic dashboards in Google Looker Studio, enabling teams to make real-time, informed business decisions.
- Developed and applied ML models for customer conversion prediction and risk analysis, increasing marketing campaign ROI by 25%.

The University of Texas at Dallas, Student Assistant (Figma, React, Miro)

Jun 2024 – Sep 2024

- Led a team of three from end-to-end data collection to website development to deliver a seamless go-live of a comprehensive technology timeline.
- Developed a retrospective analysis model using Texas historical data to identify key timelines, enabling the creation of visual representations to support informed decision-making.
- Engineered an interactive dynamic timeline in Figma, optimizing user-centric design to increase landing page engagement metrics by 15%.

Ernst & Young Global Delivery Services, Software Engineer

Feb 2021 – Oct 2022


(Adobe Analytics, Python, JavaScript, Git, Azure, React.js, Java)

- Facilitated client interactions to assist the project management team in estimating hours and allocating resources effectively.
- Directed the execution of Adobe Analytics across 50+ websites using Tag Management System, leveraging advanced features like segments, metrics, and funnels to create insightful reports and interactive dashboards, resulting in a significant pipeline value increase from 65.4% to 89.32%.
- Crafted an automated Python workflow for the Service Desk, improving data accuracy by 50% and reducing time run rate by 80% compared to manual entry, while enhancing resource creation and allocation.
- Designed user interfaces for a food ordering application using React, HTML, and CSS, leading to a 40% increase in user engagement.
- Conducted A/B testing on various UI elements, optimizing user experience and resulting in a 15% increase in customer retention.

PROJECTS

Curse of Dimensionality - Mercedes-Benz Greener Manufacturing,


May 2024 – Jul 2024

(Feature Engineering, Ensemble - Stacking, Model building) 


- Developed an ML algorithm using NumPy, Pandas, Matplotlib, Seaborn, and Scikit-learn achieving a 35% improvement in the prediction.
- Performed comprehensive feature engineering, hyperparameter tuning, grid search, and cross-validation to optimize model performance.
- Employed machine learning algorithms like Random Forest, XGBoost, Lasso Regression, SVM, and Gradient Boosting, finally trained a Meta learner (stacking - RF) achieving an R-squared (R^2) score of 0.7, MSE of 0.14 and MAE of 0.24 across all models.

Cold Start E-Commerce Product Recommendation System,

Feb 2024 – Apr 2024

(Unsupervised Learning, NLP, Clustering) 

- Constructed a model-based collaborative filtering system using Truncated SVD and cosine similarity to recommend products based on user purchase history, achieving a recommendation coverage of 94.92% and an RMSE of 0.8256.
- Designed a content-based recommendation system leveraging TF-IDF vectorization and K-Means clustering to suggest products based on textual analysis of product descriptions, optimizing clustering with silhouette scores.
- Devised Cold Start recommender using VADER and BERT models on new users' microblogging to infer their preferences.

Walmart Sales Forecasting, (Optimization in ML, Regression Analysis) 

Jan 2024 – Feb 2024

- Engineered features from historical sales and promotional data, incorporating holiday events and regional activity, resulting in a comprehensive analysis for predictive modeling.
- Trained and optimized regression models including Ridge Regression, Random Forest Regression, and Gradient Boosting Regression through log transformation of numerically skewed features, achieving R-squared (R^2) value of 0.975.
- Fine-tuned the models thorough grid search and 5-fold cross-validation, enhancing their robustness and generalization ability.

EDUCATION

The University of Texas at Dallas, MS in Business Analytics and Artificial Intelligence

Jan 2023 – Dec 2024 | GPA: 3.83

Coursework: Business Analytics with R, Advanced Statistics, Database Foundations, Prescriptive Analytics, Data Visualization, Applied Machine Learning, Big Data, Programming for Data Science, Predictive Analytics, Applied Deep Learning, Applied Econometrics and Time Series Analysis.

Certifications issued by UTD: Applied Machine Learning Certificate, Business Decision Analytics Certificate.

Kumaraguru College of Technology, Bachelors in Computer Science and Engineering

Jul 2017 – Jun 2021 | GPA: 3.7

PUBLICATION

Ezhilan. Smart Parking  , International Conference on Advancements in Electrical, Electronics, Communication, Computing and Automation(2021).