

EZHILAN CHINNASAMY

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SUMMARY

Strategic Data Analyst with a track record of converting raw data into revenue-driving insights, automated pipelines, and executive dashboards. Currently thriving in a fast-paced fintech environment, with proven impact across supply chain, consulting, and academic research domains. Adept in SQL, Python, with hands-on experience in predictive modeling, reporting automation, and cross-functional collaboration. Recognized for rapid execution, structured thinking, and translating complex data into clear business action. Eager to bring sharp analytical thinking and cross-cultural agility to a data-driven team focused on scale, growth, and innovation. Open to full-time opportunities with H1B sponsorship

SKILLS

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

Visualization & Analytics Tools: Adobe Analytics, Google Analytics, Tableau, PowerBI, Advanced Excel (Pivot table, LOOKUP), Google Looker Studio

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

ML & Modeling: Predictive Analytics, Regression, Classification, Clustering, Time Series, NLP (TF-IDF, VADER, BERT), A/B Testing, Ensemble Models

Professional Skills: Cross-functional Collaboration, Critical Thinking, Ownership, Rapid Execution, Communication

WORK EXPERIENCE

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

Oct 2024 – present | Dallas, TX

- Became the go-to analyst for high-stakes reporting during a critical product expansion phase, influencing exec-level decisions and earning recognition for transforming complex data into strategy that drove growth and operational clarity.
- Built 15+ interactive dashboards in Looker Studio to monitor KPIs, performance trends, and partner metrics, core to weekly leadership reviews.
- Engineered automated reporting pipelines with Python and SQL, cutting manual workload by 40% and boosting turnaround speed and accuracy.
- Collaborated with Product, Marketing, and Risk teams to embed predictive insights into reporting, aligning analytics with strategic priorities.

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

Jun 2024 – Sep 2024

- Led a 3-member team in translating historical data into an interactive timeline site, manage data sourcing, analysis, and full-stack implementation.
- Mined and synthesized decades of Texas tech industry data to uncover pivotal innovation patterns, turning static archives into actionable narratives that laid the foundation for an interactive public-facing timeline.
- 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)

- 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