

GAYATHREE GOPI

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<https://linkedin.com/in/gayathreegopi> | <https://gayathreegopi.github.io/> | Austin, TX

EDUCATION

The University of Texas at Austin – McCombs School of Business

May 2025

Master of Science, Business Analytics – Financial Analytics Track | GPA: 3.92/4.00

- Optimization I & II, Analytics for Unstructured Data, Advanced Corporate Finance and Investments, Advanced Machine Learning, Analytic Finance and Machine Learning, Principles of Empirical Finance, Unsupervised Learning

The University of Texas at Austin – College of Natural Sciences

May 2024

Bachelor of Science, Biology – Computational Biology | Major GPA: 3.90/4.00

- University Honors List

Fall 2020 – Spring 2024

TECHNICAL SKILLS

- Python: Data Analysis (pandas, NumPy, matplotlib), Natural Language Processing (spaCy, nltk, VADER, BERT), Machine Learning (PyTorch, scikit-learn, TensorFlow), Optimization (gurobipy, scipy), Financial Analysis (yfinance)
- R: Machine Learning (randomForest, BART), Statistical Testing (ANOVA, Chi-Square), Data Wrangling & Visualization
- Software: MS Excel & Financial Modeling, SQL, C++, Neo4j, Tableau, GitHub, Visual Studio Code, TACC Supercomputer
- Certifications: Google Data Analytics Professional, Google Business Intelligence Professional, Snowflake Data Warehouse

EXPERIENCE

Diligence.io – Business Analytics Capstone Project; Austin, TX

November 2024 – Present

- Collaborating with Diligence.io to develop real estate analytics solutions by integrating and analyzing structured and unstructured data from county sources to identify distressed properties and predict market dynamics
- Utilizing Python, OCR, and data scraping to extract and clean mortgage and interest rate data for predictive modeling
- Designing interactive dashboards in Tableau/Power BI to visualize land use and zoning data, providing actionable insights to inform investment decisions for Keating Resources and other real estate development companies

K7 Capital Partners – Associate (Part-Time); Austin, TX

July 2023 – October 2024

- Gained investment analysis, deal evaluation, and due diligence experience across multiple real estate asset classes
- Assisted in evaluation of \$20 million small multifamily real estate investments in Austin-San Antonio mega-metro
- Researched LinkedIn analytics and implemented improvements to grow presence from 8 to 615 followers in 6 months

DATA SCIENCE PROJECTS

Cryptocurrency Price Prediction Using Market and Sentiment Data

October 2024 – Present

- Designing and implementing an LSTM-based recurrent neural network using Python to predict Bitcoin prices, leveraging time series data from yfinance and incorporating sentiment analysis to model market behavior and investor sentiment
- Implementing regression and classification models to forecast future price movements, optimizing hyperparameters like learning rate, dropout rate, and number of layers to maximize prediction accuracy
- Integrating sentiment to analyze impact of social dynamics on price, enhancing relevance for real-world trading strategies

Index Fund Construction and Portfolio Optimization for Tracking NASDAQ-100

October 2024

- Leveraged Gurobi and Python to design integer and linear programming models that construct a NASDAQ-100 tracking portfolio that was capable of predicting 2024 NASDAQ-100 returns based on 2023 data
- Minimized tracking error for improved alignment with performance index and efficient investment management

Exploring Public Opinion Using Social Media Analytics for NASA and ISRO

October 2024

- Employed Python, spaCy, scikit-learn, and BERT for advanced NLP techniques, performing topic modeling, sentiment, and image analysis to assess public sentiment on Reddit and Instagram
- Delivered actionable insights on public engagement, enabling more targeted outreach strategies, enhancing brand positioning, and optimizing social media investment for NASA and ISRO

LEADERSHIP AND INVOLVEMENT

American Society for Microbiology at UT Austin – President; Austin, TX

December 2022 – May 2023

- Led awareness & education efforts, hosted talks by experts and researchers, and spearheaded social media campaign

Hindu YUVA at UT Austin – Marketing Chair; Austin, TX

August 2022 – Present

- Marketed for awards, coordinated with multiple chapters to plan for Southwest region-wide leadership training camp

ADDITIONAL INFORMATION

Languages: Fluent in Tamil, Limited Working Proficiency in German

Interests: Indian classical dance and music, ancient Indian visual art forms, graphic design, volleyball

Work Eligibility: Eligible to work in the United States with no restrictions