Brandon Amarasingam

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DATA SCIENTIST

Results-driven Full Stack Data Scientist with a strong mathematical and statistical background and extensive experience in digital assets. Seeking to leverage proven expertise to drive data-driven decision-making and business success in a dynamic role.

TECHNICAL & INTERPERSONAL SKILLS

Languages and Libraries: Python, Scala, Scikit-Learn, NLTK, PyTorch, TensorFlow, Keras, PyMC, BeautifulSoup, Pandas, Java, C++, SQL, R, SAS, MATLAB, Tableau, LaTeX, Matplotlib, Seaborn
Tools: Version Control (Git), Distributed Computing (Spark), Various APIs
Interpersonal skills: Problem solving, Organization, Time Management, Communication, Collaboration

PROJECTS

BEV Growth Within WA | GitHub | Python | Streamlit
- Engineered a Streamlit application for visualizing growth projections of BEVs in Washington State
- Applied ARIMA and VARMA predictive modeling to forecast BEV expansion trends, leveraging public datasets from the US government site for robust analysis and predictions

Detect AI vs Human Text | GitHub | Python
- Developed a precision-tuned classification model to discern human and AI-generated responses
- Utilized ChatGPT API for AI responses and the Reddit API to curate a diverse human response dataset, enhancing model robustness
- Utilized various cutting-edge NLP techniques for the analysis and classification of responses

EXPERIENCE

Iter Innovandi, Data Scientist Intern
- Engineered an AI voice assistant with real-time transcription, LLM integration, and TTS for precise input, context-aware responses, and natural speech, optimized for performance and low latency
- Performed comprehensive data analysis, model design, training, and fine-tuning to improve the AI voice agent's performance, including voice data collection, preprocessing, and exploratory analysis to ensure high-quality results
- Built an automated email sender and reader with HTML templates and tracking features for optimized delivery and engagement monitoring across large-scale email campaigns

Laughpad, ML Engineer/Technical Advisor
- Implemented a laughter recognition model with PyTorch using three open-source datasets, and successfully deployed it on Azure, ensuring scalability and robust performance
- Tailored, trained and fine-tuned models for diverse scenarios; optimized ResNet with Data Augmentation for improved performance in noisy environments

Fantom Digital, Research Analyst
- Helped scale the startup to over $3M+ in revenue through strategic growth and marketing
- Managed performance and risk assessments of DeFi projects to facilitate secure investments, using SQL for data analysis and generating reports for data-driven decisions and analytics
- Collaborated w/cross-functional teams to ensure the design and delivery of performant, scalable apps

EDUCATION

CFA Institute, Chartered Financial Analyst (CFA) Level 1
General Assembly, Data Science Immersive
- Techniques: Transfer Learning, Natural Language Processing, Computer Vision, Reinforcement Learning, Bayesian Inference, Time Series Analysis, Unsupervised Clustering Algorithms, A/B Testing, Various Regression and Classification ML Algorithms, Deep Learning Techniques
Carleton University, Bachelor of Mathematics, Statistics