Anusha Sivakumar

Data Scientist + Biomedical Engineer | +1(504)758-2512 | Amherst, MA | anushanikila.s@gmail.com | LinkedIn | Portfolio

SKILLS

Languages: Python, R, LOCAL, Bash, JavaScript, TypeScript, MATLAB
Front-End & Back-End: React, Next.js, HTML, CSS, TailwindCSS, Node.js, Express, Django, Flask
Data Science & Visualization Tools: Predictive Modeling, Statistical Analysis, Data Wrangling, Tableau, Power BI, Excel
Database & Version Control: SQL - MySQL, PostgreSQL. NoSQL - MongoDB, Redis, Git, Github, Github Actions
Cloud & Devops: Docker, AWS (S3, EC2, Lambda, DynamoDB, RDS), Vercel, Databricks, Snowflake, Kafka, GCP, Azure
Libraries & Frameworks: Pandas, Numpy, Scikit-learn, TensorFlow, Keras, PyTorch, NLTK, spaCy, Matplotlib

EXPERIENCE

Domain Data Analyst (Internship), CareCentra Inc., *Remote* ***Feb 2024 – Dec 2024***

- Designed and optimized AI-driven nudging interventions for maternity, cardiac and respiratory programs on app to boost patient adherence by 90%.
- Partnered with data engineering team to prototype real-time data pipelines for health data ingestion, processing, and predictive model feedback loops using AWS Lambda and Azure Data Factory.
- Enhanced regression-based predictive models with improved feature engineering, increasing behavioral propensity and model accuracy.

Freelance Software Developer, 100Devs, Remote ***May 2021 – Apr 2024***

- Modernized legacy systems with front-end & back-end upgrades which accomplished increased platform speed and functionality by 100% for small business clients - as part of uplifting COVID-related downturns.
- Applied software engineering principles to develop scalable web solutions, optimizing UI/UX via iterative testing and data-driven refinements.
- Boosted client engagement by 95% through analytics-informed design updates.

Strategy & Operations Associate, Bhoomi Inc., *San Francisco, CA* ***Mar 2019 – Jun 2020***

- Implemented business growth pipelines by identifying business opportunities by analyzing customer data and insights driving 80% sales increase.
- Led cross-functional campaigns with PMs and marketing team, optimizing digital marketing strategies and increasing customer engagement by 100%.
- Managed business performance tracking via KPI dashboards in Power BI to drive strategy pipelines.

Clinical Software Specialist, Brainlab Inc./UCSF Medical Center, San Francisco, CA ***Nov 2017 – Mar 2019***

- Delivered real-time technical software consultation in neurosurgery with 100% success in patient outcome with image-guided navigation software and novel clinical trial software deployments.
- Administered Quentry cloud platform and Salesforce CRM, executing system integration and on-premise-to-cloud server migration projects to enhance interoperability and maintain HIPAA/FDA compliance.
- Led clinical teams for optimal implementation of software, increasing adoption and usage efficiency by 100%.
- Fostered strategic partnership with customer (UCSF) and across cross-functional teams internally (engineering + business) to support sales efforts leading to 45% regional growth and extending a multi-year support deal.

EDUCATION

University of Massachusetts - Amherst, MA ***Sept 2024 - May 2025***

Master of Science in Data Science & Analytics (Specialization: ML/AI)

Relevant Coursework: Machine Learning Algorithms, Quantitative Data Analysis, Natural Language Processing

Tulane University ***Aug 2013 - May 2017***

Bachelor of Science in Biomedical Engineering (Premed Track)

PROJECTS & RESEARCH

Evaluating Large Language Model Preferences Under Controlled Indifference - UMass Amherst ***Feb 2025 – Present***
Conducted NLP research on agentic AI systems and their core LLMs to study pronoun bias and controlling preference modeling in niche scenarios such as hiring decision-making. (Publication in review stages)
Voice-to-Text Q&A Chatbot - AWS Lambda, Transcribe, SageMaker - Built an AWS-based chatbot for real-time voice-to-text interaction, integrating Retrieval-Augmented Generation (RAG) with GPT-powered responses.
Predictive Modeling for Healthcare Adherence - CareCentra Internship - Developed patient adherence prediction models using logistic regression and gradient boosting, achieving significant accuracy gains for targeted health interventions.

CERTIFICATION

Cloud Engineering with Google Cloud Specialization ***Apr 2020 – Present***