ANJALI SREEJA KADIYALA

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SUMMARY
• Data Scientist with 3+ years of experience in designing, developing, and deploying machine learning models to address complex business challenges and make informed strategic decisions.
• Proficient in Python, SQL, Tableau, Pytorch, Scikit-learn, Pandas, Numpy, and other libraries for data manipulation and analysis.
• Strong ability in utilizing AWS for scalable data solutions and optimizing process workflows.

WORK EXPERIENCE
Data Scientist, Axbio Inc.   Aug 2023 – Present
• Led the development and validation of proprietary sequencing algorithms, enhancing accuracy by **8-10%**. My proof of concept was instrumental in securing additional funding by strengthening investor confidence.
• Revolutionized the deep learning framework by integrating **bi-directional RNNs** and **transfer learning,** increasing basecalling accuracy from **86% to 94.2%**. Directed multiple successful releases, ensuring seamless system integration.
• Orchestrated the development and management of a comprehensive **end-to-end sequencing pipeline** (including data collection, processing, analysis, and basecalling), reducing data processing times and enabling independent scientific analysis through reports and FASTA files. Conducted detailed weekly data analyses and communicated actionable insights through Tableau dashboards, significantly impacting strategic decisions and aiding in funding acquisition.

Software Development Intern, Caliber IT Solutions, Inc.   Feb 2023 – Jul 2023
• Designed and implemented a client-facing portal that introduced online insurance payments, transforming user interactions and dramatically reducing processing times. Maintained robust security and cross-browser compatibility, ensuring **99% system uptime** and enhancing user accessibility.

Data Scientist, Deep Algorithms Solutions   Feb 2019 – May 2021
• Built and deployed an end-to-end **optical character recognition** model using **AWS Textract** and **EC2 instances**, automating client data entry tasks. Communicated the OCR solution to clients, demonstrating its capabilities and benefits, facilitating its successful integration and elevating operational efficiencies.

RESEARCH EXPERIENCE
Student Research Assistant, San Jose State University   Jan 2022 – Jan 2023
• Utilized advanced **signal processing techniques**, including Fourier and wavelet transforms, to analyze ECG data. Developed and refined a transformer-based deep learning model for ECG biometric authentication, increasing accuracy by **7%** and contributing to innovative authentication methods.
• Implemented and customized the LFADS (Latent Factor Analysis via Dynamical Systems) model to analyze neural spiking data, significantly improving the understanding of neural dynamics. Innovatively optimized and adapted the model to Julia, achieving a substantial increase in computational efficiency - requiring 50% fewer GPU resources than the original Python implementation. This advancement was rigorously validated through comparative analysis, underscoring the model's improved performance and efficiency.

AI Research Intern, International Institute of Information Technology – Hyderabad   May 2021 – Jan 2022
• Conducted pioneering research into AI-driven healthcare solutions, focusing on ECG interpretability. Developed a bespoke question answering system using clustering techniques to create the dataset, slashing the time by **75%**.
• Built a **sequence-to-sequence** language model using **GPT** and **RAG** for question answering, incorporating **generative AI** improvement techniques like **REALM**. Worked closely with a Cardiologist to ensure practical applicability of the research.

EDUCATION
Master of Science, Artificial Intelligence | San Jose State University   Jan 2022 - Dec 2023
Bachelor of Technology, Computer Science | Jawaharlal Nehru Technological University   Jul 2017 - Aug 2021

SKILLS
Languages: Python, Julia, R, Java, SQL, HTML, C++, Javascript, C
Frameworks/Tools: Pytorch, Tensorflow, HuggingFace, Scikit-learn, Pandas, Numpy, Matplotlib, Seaborn, Bio-Python, FARM, Haystack, REALM, Tableau Desktop, Flask, React, Docker, Kubernetes, Git, REST
ML Algorithms: Decision Trees, Random Forests, Linear and Logistic Regression, Naïve Bayes, SVM, KNN, CNN, RNN, LSTM, Transformer, Vision Transformer, UNet, R-CNN, Markov Decision Process, DDPG, GPT, BERT
Cloud Services: Amazon Web Services(S3, Lambda, Textract, EC2, Rekognition, Sagemaker), GCP, Firebase