Sai Aditya Koduri

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Relevant Links: LinkedIn | GitHub
Programming Languages: Python, R, Java, JavaScript, HTML, CSS, Swift
Frameworks: TensorFlow, Keras, scikit-learn, NumPy, pandas, Seaborn, matplotlib, ggplot2, dplyr, shiny, BeautifulSoup
Technologies: Git, Docker, AWS (S3), Tableau, MS PowerBI, MS Office Suite
Work Eligibility: Eligible to **work in the U.S. with no restrictions**; Employment Authorization Document (EAD) holder

EDUCATION

The University of Texas at Austin **May 2027**

- BS Statistics & Data Science, Computer Science Certificate; GPA: 4.0
- Activities & Societies: MLDS (Technical Officer), Freshman Research Initiative, Intramural Basketball, ASA

WORK EXPERIENCE

Texas Machine Learning & Data Science Club **January 2025 - Present**
Technical Officer Austin, TX

- Expected to coordinate weekly workshops on machine learning topics & models to present to organization members.
- Will manage upcoming data competitions with preparing datasets, creating & prompting LLMs, and testing code.

The University of Texas at Austin | Quantum Computing FRI **January 2025 - Present**
Undergraduate Researcher Austin, TX

- Will learn the properties of quantum states, how to manipulate them, and quantum error correction by approaching topics physically with optics models, and practically with Python implementations of quantum theories.
- Expected to focus on explaining and implementing the BB84 quantum key distribution protocol, use entanglement for teleportation, and program Python implementations of quantum algorithms (Deutsch, Simon, Grover, and Shor).

iCode Franchise **January 2023 - August 2024**
Coding Instructor Leander, TX

- Instructed topics of Python, Java, and C# to 30+ students twice a week with a focus on app and web development using XCode and Swift applications to create personal websites and games.
- Developed and conducted a 40-hour summer camp to foster students' passion for drone programming and game studio development using Python to implement computer vision techniques.
- Coordinated lectures with hands-on learning using Raspberry Pi to teach processing, physical computing, input/output (GPIO), programming, and IoT with data collection from sensors.

Kiranam Technologies **June 2023 - August 2023**
Data Analyst Intern Dallas, TX

- Analyzed large datasets to develop 20+ efficient models trained to a 95.6% accuracy rate by cleaning, sorting, and filtering, and using Power BI & Tableau to provide insights to clients to make business intelligence decisions.
- Designed and presented a final visualized data report including 12 complex graphics based on a video game sales dataset to improve the budgeting of games, equipment, machinery, etc.
- Mentored by professionals with over 15 years of experience in the field and gained an objective world perspective of an information technology solutions company working with deep learning technologies.

Illinois Institute of Technology **June 2023**
Data Visualization Intern Remote

- Developed visuals and weekly reports for over 10+ sponsors that answer critical questions about their social media marketing business and their influenced profits made on advertisements.
- Researched a wide range of ways to improve upon the marketing of a business using over 30 datasets by collecting, cleaning, filtering, and visualizing the data through density marks, bullet graphs, and highlight tables.

PROJECTS

Real Estate Price Prediction | Github Demo | (Tensorflow, Keras, scikit-learn, Seaborn, pandas, matplotlib) **2025**

- Built and deployed a supervised machine learning model using linear regression algorithms to predict real estate prices.
- Collected, cleaned, and preprocessed a dataset with 12,000+ rows, handling missing values by 95%, outliers (via Z-scores) by 90%, and 3 categorical variables using one-hot encoding for improved prediction.
- Built a 3-layer feedforward neural network consisting of 4 layers with neurons using ReLU and linear activation for regression; implemented early stopping & batch normalization leading to a 15% reduction in overfitting.
- Achieved a MAE of $68,000, in the 10-20% normal threshold by optimizing hyperparameters like batch size & epochs.

Computer Vision Autonomous Cars | (AWS Rekognition, Teachable Machines, LOBE) **2024**

- Built an image classification model for identifying a wide range of elements in traffic data using computer vision.
- Collected and tested 600+ images on AWS Rekognition to collate, create an S3 bucket, assign custom labels, and train.
- Used Teachable Machine tools to compare results by training the model with epochs of 50, and a learning rate of 0.001 to produce a 97% accuracy rate in identifying traffic elements.