Sneha Sarkar

Bangalore | +91 7975879142 | sneha391998@gmail.com | GitHub | LinkedIn | Portfolio

BE in Computer Science GPA: 8.37/10.0 PES University, India Aug 2020

Relevant Certifications - PG Diploma in Machine Learning & AI, Azure Fundamentals, Modern Application Development, Cloud Computing

Publications - Effectuating Supervised Machine Learning Techniques for Multiclass Classification of Problematic Internet and Mobile Usage

TECHNICAL SKILLS

Programming Python, Java, Javascript, HTML, CSS, C, C++

Databases SQL, SSIS

Cloud Technologies AWS, Microsoft Azure DataBricks, Docker, Kubernetes, Hadoop, Kafka

Tools Git, Flask, Spark, Tableau, Airflow, PowerBI, ReactJS, NodeJS, RASA, PowerApps, PowerAutomate, Jenkins,

Tidal ETL

Packages TensorFlow, Pandas, Spacy, Sci-kit learn, Keras, OpenCV, PySpark, TKinter, NLTK, Darts, Statsmodels

ML/AI Neural Networks, Deep learning, Natural Language Processing, Time series forecasting, Recommendation

systems, Boosting, Image + Video processing, Sentiment Analysis, MLOps

PROFESSIONAL EXPERIENCE

Adobe – Bangalore, India

Software Development Engineer II

Aug 2020 – Till Date

- Developed user-friendly utility to securely expose internal databases of over a million records across 30 tables to authenticated external teams for seamless data manipulation using **PowerApps** and **PowerAutomate**, earning the "High-Five" Award.
- Designed and implemented a dynamic, evolving chatbot using Tkinter, NLTK and Keras, now deployed using RASA. Peer-tested
 and presented at Adobe's annual hackathon, the project secured first place, delivering substantial time and cost savings to
 onboarding operations.
- Developed a cloud-based ETL data analytics pipeline on Databricks, using Darts (NaiveDrift, Prophet, NBEATSModel) and StatsModels (ARIMA) for customer churn prediction and cross-product recommendations. Employed Airflow for orchestration, dynamic model evolution for accuracy, and PowerBI for visual insights and key performance indicators.
- Managed enterprise finance SQL databases in roles spanning development, data profiling and validation.

Unisys - Bangalore, India

Cloud Intern

Jan 2020 – Mar 2022

- Led **Python**-based utility development within Unisys' CloudForte team, deploying a **Docker**-integrated solution for seamless JSON-to-Excel/Word conversion.
- Constructed the "Unisys Cloud Architecture Navigator" database with prioritized recommendations for efficient cloud expenditure management, AWS well-architected framework adherence, and enhanced security.
- Acquired **Kubernetes** training to proficiently manage containerized applications.

Hasura – Bangalore, India

Product Development Fellow

Dec 2017 – Feb 2018

- Developed a multimedia-based voting application which was implemented company-wide using Flask, ReactJS, and AWS.
- Utilized the generated data to construct analytics using **Natural Language Processing (NLP)** and neural networks **(CNNs)** revealing trends in employee sentiments and decision-making processes in **Python**.
- Earned "Distinguished Fellow" Award.

PROJECTS AND PUBLICATIONS

Supervised Machine Learning Techniques for Classification of Problematic Internet and Mobile Usage

<u>Paper</u>

- Created a non-invasive questionnaire to collect an 8000-record dataset with 18 dimensions.
- Data cleansing, PCA, encoding, normalization then training, testing, modifying and deploying ML models such as XGBoost, SVM, LSTM, LightGBM for optimal accuracy.

Gesture_Recognition-using-a-Conv3D-and-CNN-RNN-based-Deep-Learning-Model

<u>GitHub</u>

 Analysis of videos using neural networks for the purpose of gesture recognition. Compared Transfer Learning (VGG16) + RNN (GRU), CNN + RNN and Conv3D models, achieving 88-93% accuracy.

Flappy Bird ft. Neuroevolution

<u>GitHub</u>

- Created a version of the popular game "Flappy Bird", featuring a gameplay where users competed alongside the computer.
- Built a neural network with neuroevolution, emphasizing reinforcement learning in **JavaScript** utilizing p5.js for graphics.

Credit Card Fraud Detection

<u>GitHub</u>

• Created a pipeline for fraud detection using XGBOOST model with Random Oversampling with StratifiedKFold CV, and Logistic Regression with L2 Regularisation with RepeatedKFold Cross Validation.

LEADERSHIP AND VOLUNTEERING

- o Volunteer PES University IEEE Chapter, inGenius Hackathon, Sankalp NGO, Adobe Project Smile CSR, Adobe Run4Fun Marathon,
- Leadership positions TEDxPESU Logistics and Design (2016, 2017), Adobe Action Circles, Adobe Dance Network.