SUDARSHAN DUDHE

Boston, MA 02120 | 857-352-9843 | sdudhe92@gmail.com

SKILLS

Languages: Python (Scikit-learn, Pandas, NumPy, TensorFlow, Keras, PyTorch, NLTK), R, SQL, Java
Machine Learning: Supervised Learning, Deep Learning, NLP, Statistical Modeling, Predictive Analytics, Feature Engineering
ML Frameworks: TensorFlow, PyTorch, Scikit-Learn, Keras, Hugging Face, OpenCV, YOLO
Data Tools: Apache Airflow, Snowflake, AWS (S3, EC2), Vector Databases (Pinecone, FAISS), MongoDB, PostgreSQL
Visualization: Tableau, Power BI, Matplotlib, Seaborn, Plotly
ML Engineering: MLOps, Model Deployment, CI/CD, Docker, Git, Jupyter Notebooks, Cross-Validation

PROFESSIONAL EXPERIENCE

AI/ML Engineer (Intern)   Jan 2025 – May 2025
FounderWay, Boston, MA

- Developed machine learning models and AI agents using OpenAI GPT-4 and LangChain, implementing retrieval-augmented generation (RAG) pipelines with Pinecone vector database achieving 99% accuracy on curriculum recommendation tasks
- Built predictive models and deep learning pipelines to optimize AI agent decision-making, implementing evaluation metrics and human-in-the-loop feedback systems that improved model performance by 40%
- Applied MLOps practices including model versioning, monitoring, and deployment using Docker and CI/CD pipelines, ensuring production reliability and enabling rapid iteration on machine learning experiments

Data Scientist   Jan 2021 – Aug 2023
Arges Global Limited, Mumbai, India (Remote)

- Developed machine learning models for textile production optimization, implementing predictive analytics that reduced order processing time by 30% through automated pattern recognition and demand forecasting
- Built data pipelines processing 10GB quarterly data using Python (Pandas, NumPy), performing feature engineering and statistical analysis to extract actionable insights for business decision-making
- Implemented data visualization dashboards using Matplotlib and Seaborn, creating interactive reports that enabled stakeholders to identify trends and optimize production workflows
- Conducted exploratory data analysis (EDA) on production datasets, applying statistical techniques and hypothesis testing to uncover patterns and drive data-informed operational improvements

Data Engineer   Nov 2019 – May 2020
Deqode Solutions, Indore, India

- Developed data collection pipelines and implemented statistical models for cryptocurrency market analysis, applying machine learning techniques to identify patterns and predict price movements
- Conducted exploratory data analysis (EDA) on financial datasets, performing feature selection and engineering to improve model accuracy for trading strategy recommendations

Data Scientist   Apr 2018 – Nov 2019
Simplify Reality, Inc, Gurugram, India

- Built AI-driven customer service solutions using Python and machine learning algorithms, implementing NLP techniques for sentiment analysis and automated response generation
- Developed predictive models for Instagram engagement metrics, applying statistical analysis and feature engineering to optimize content recommendation strategies and improve user engagement by 25%
- Conducted detailed data analysis on healthcare platform usage patterns, creating visualizations and statistical reports that informed product development decisions

PROJECT EXPERIENCE

JobFit AI – NLP-Powered Resume Analysis System   *Python, OpenAI GPT, NLP, Pinecone, Scikit-Learn, PyTorch*

- Developed end-to-end machine learning system using OpenAI GPT-4 and NLP techniques (Spacy, NLTK) to analyze resumes and job descriptions, achieving 95% semantic matching accuracy through advanced text processing
- Implemented feature engineering pipelines extracting skills, experience, and qualifications from unstructured text, applying TF-IDF vectorization and embedding models with Pinecone for semantic search capabilities
- Built predictive models using Scikit-Learn to score candidate-job fit, conducting hyperparameter tuning with GridSearchCV and K-Fold cross-validation that improved recommendation accuracy by 40%
- Deployed production ML pipeline using Apache Airflow for workflow orchestration, integrating AWS S3 and Snowflake for data storage, with Docker containerization ensuring scalable and reproducible model serving

EDUCATION

Master of Science in Information Systems   Aug 2025
Northeastern University, Boston, MA | GPA: 3.4/4.0
Relevant Coursework: Neural Modeling Methods, Parallel Machine Learning, Data Science, Advanced Data Science

Bachelor of Technology in Information Technology   May 2017
Yeshwantrao Chavan College of Engineering, Nagpur, India