E.SANJAY

📍 Ambalapattu South, Thanjavur, Tamil Nadu 614626

Mail ✉ sanjayelangovan22@gmail.com   Phone 📞 +919360383424

SUMMARY

I'm a passionate and curious data science and machine learning learner with strong skills in Python, Pandas, NumPy, and Scikit-learn. I enjoy working with data-cleaning it, analyzing it, and building models that solve real-world problems. I have hands-on experience in Natural Language Processing (NLP) projects and love uncovering insights from text data. I'm also comfortable working with Excel and Power BI to create dashboards and reports, and I use MySQL for managing and querying structured data. Always eager to learn new tools and techniques, I'm looking for opportunities where I can apply my skills, grow as a data professional, and contribute to impactful projects.

EDUCATION
Oct 2021 - May 2025

Bachelor of Engineering (B.E.) – Computer Science and Engineering

St. Joseph's College of Engineering & Technology, A.S Nagar, Elupatti, Thanjavur – 613 403, Tamil Nadu

CGPA: 8.3 / 10

Consistently strong in academics with a current CGPA of 8.3 and no history of arrears. Actively involved in academic projects, teamwork, and continuous learning. Known for taking initiative, being a dependable contributor, and always eager to learn and apply new skills in real-world scenarios.

SKILLS

Programming & Query Languages
- Python
- SQL (MySQL)

Data Analysis & Manipulation
- Pandas, NumPy
- Excel (Advanced formulas, Pivot Tables, Charts)
- Power BI (Interactive dashboards, data visualization)

Machine Learning
- Scikit-learn (Classification, Regression, Clustering)
- Supervised & Unsupervised Learning
- Model Evaluation (Accuracy, F1 Score, Confusion Matrix)
- Feature Engineering, Hyperparameter Tuning (GridSearchCV)

Natural Language Processing (NLP)
- Text Preprocessing (Tokenization, Lemmatization, Stopwords)
- Sentiment Analysis, Named Entity Recognition (NER)
- Vectorization (TF-IDF, Bag of Words, Word2Vec)

Data Visualization
- Matplotlib, Seaborn
- Power BI
- Excel Charts

Tools & Platforms
- Jupyter Notebook, Google Colab
- VS Code
- Git & GitHub
- Streamlit (for data science web apps)
- Canva (for visual presentations and dashboards)

Soft Skills
- Strong Problem-Solving Abilities
- Analytical Thinking
- Communication & Team Collaboration
- Time Management
- Fast Learner and Self-Motivated

CERTIFICATIONS

- NPTEL – Computer Networking and Internet Protocol
- NPTEL – Ethical Hacking
- Introduction to Machine Learning – Kaggle
- Data Analysis with Python – freeCodeCamp
- Basics of Python – SoloLearn
- Python Developer – SoloLearn

PROJECTS

1. YOLO-Based Fall Detection System
Developed a fall detection model using the YOLO object detection algorithm to recognize human posture and detect fall events in video footage.
Tools: Python, OpenCV, YOLOv5, Deep Learning
Key Features: Real-time object detection, human safety monitoring, model trained on fall datasets.

2. Cancer Detection Web App
Built a logistic regression model to classify cancer presence based on medical features and deployed it as a web application.
Tools: Python, Pandas, Scikit-learn, Streamlit
Key Features: Model training, prediction interface, user-friendly dashboard.

3. BERT-Based Resume Matcher
Created an NLP model using BERT embeddings to match resumes with job descriptions for improved candidate shortlisting.
Tools: Python, BERT (Transformers), NLP, Streamlit
Key Features: Semantic similarity scoring, resume-job match ranking, interactive web UI.

4. Intrusion Detection System (IDS) using Random Forest
Implemented a Random Forest classifier to detect network intrusions and tuned hyperparameters using GridSearchCV.
Tools: Python, Scikit-learn, GridSearchCV, Pandas
Key Features: Classification of normal vs. malicious traffic, model optimization, evaluation metrics.

5. Rain Forecast Prediction System
Built a weather prediction model to forecast rainfall using Decision Tree and Random Forest algorithms.
Tools: Python, Scikit-learn, Pandas, Matplotlib
Key Features: Data preprocessing, model comparison, rainfall classification.

INTERNSHIPS

Web Development Intern
IGNIZEE, No. 157, Medavakkam Main Road, Ullagaram, Chennai, Tamil Nadu – 600091
Duration: 19 June 2023 – 05 July 2023
- Assisted in designing and developing responsive web pages using HTML, CSS, and JavaScript.
- Worked on front-end layout improvements and user interface enhancements.
- Collaborated with the development team to test and debug web applications.
- Gained experience in real-world project structure and client-side scripting.

Python Programming Trainee
WB (Internship Training Program), No. 12, South Main Street, Near Old Bus Stand, Thanjavur, Tamil Nadu
Duration: 18 January 2024 – 31 January 2024
- Gained hands-on experience with Python basics, control structures, and data types.
- Practiced writing reusable code and functions to solve logical problems.
- Explored real-time examples of Python for automation and data handling.
- Strengthened programming logic through structured training and mini-tasks.

PORTFOLIO & CODE LINKS

- **GitHub**: https://github.com/Sanjay-E22
- **Portfolio**: https://sanjay-e22.github.io/