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CERTIFICATIONS

Karpagam College of Engineering| Anna University | Coimbatore	Year: 2027	CGPA: 7.89
S.B.O.A Matriculation Hr. Sec. School| | HSC| Coimbatore	Year: 2023	GPA: 7.6
S.B.O.A Matriculation Hr. Sec. School | SSLC | Coimbatore	Year: 2021	GPA: 8.5

SKILLS SUMMARY

Languages: Python, Java, JavaScript, SQL, HTML/CSS
Frameworks & Libraries: PyTorch, TensorFlow, Keras, Scikit-learn, Transformers, YOLOv8, OpenCV, Pandas, NumPy
Web & Tools: FastAPI, Flask, Bootstrap, GitHub, Docker, Google Colab, Kaggle,Salesforce
Data Visualization: Matplotlib, Seaborn, Power BI, Tableau
AI Tools: Whisper ASR, SHAP, LIME, LangChain (RAG), Huggingface
Soft Skills: Communication, Teamwork, Leadership, Critical Thinking

KEY PROJECTS

Real time Sign Language Recognition System *[June '25]*

- Built a real-time sign language recognition system using MediaPipe, OpenCV, and RandomForest, enabling accurate multi-gesture classification, dynamic confidence visualization, and smooth interactive detection interface.
- Implemented a temporal feature pipeline by aggregating hand-landmark trajectories across frames, improving robustness against motion noise and inconsistent signing speed.
- Designed a low-latency inference loop with adaptive frame sampling and probability smoothing, maintaining real-time performance while reducing false positives and gesture flicker.

Active to Passive Knowledge - an Experimental Learning Platform *[Sept'25]*

- Developed an immersive multi-domain learning platform addressing the shift from Passive to Active Knowledge through real-time Digital Twin analytics.
- Built 5 interactive modules - Virtual Instruments, Solar System Chatbot, 3D Chemistry Molecules, Physics Simulations, and Human Organ Anatomy Explorer.
- Integrated AI-driven chatbots and 3D visualizations for instant explanations, quizzes, and guided learning across STEM subjects.

Digital Twin for Automated E waste Deconstruction *[Sept'25]*

- Developed a 5-model AI pipeline (ResNet-50, YOLOv8, ML models) for E-waste classification, detection, and deconstruction strategy prediction.
- Implemented a Digital Twin dashboard visualizing material composition, hazard risk, and optimal disassembly simulation.
- Built dual-mode detection (real-time + static) via FastAPI for low-latency streaming and offline validation..

Raksha AI – An Intelligent, Digital Guardian for Threat Detection & Human Safety *[Dec'25]*

- Developed Raksha AI, a unified AI-powered safety platform for image, text, email threat detection and autonomous agent activation.
- Engineered a privacy-first, modular FastAPI system with real-time alerts, evidence vault, and AI-driven risk analysis.

Fake News Detection *[Sept'24]*

- The system uses Logistic Regression to classify news credibility and leverages Git, DVC, and Docker for version control and containerized deployment, with a Flask backend for seamless prediction serving.
- Applied feature engineering and text preprocessing (TF-IDF, stopword removal) with reproducible data pipelines tracked via DVC, ensuring consistent training–inference behavior across versions.

CERTIFICATIONS

- Introduction to Machine Learning |NPTEL| *[Nov'24]*
- Introduction To Internet of Things |NPTEL| *[Apr'25]*
- Agentblazer-Innovater |Salesforce| *[June'25]*

ACHIEVEMENTS

- B2 – Speaking in Lingua Skill Test *[May '24]*
- 1st Prize in Hackzilla Conducted by IEEE Comsoc society and KPRIET *[Sep' 25]*
- Top 10 Finalists- Gravitas '25, Vellore Institute of Technology *[Sep' 25]*
- Winners – AIM' 25 , Infynd – India *[Oct' 25]*

INTERNSHIPS

FULL STACK DEVELOPMENT INTERN | LearnLogicify Technologies *[Jun'25]*

• Built and deployed end-to-end web applications using modern frontend and backend technologies with database integration.
• Implemented RESTful APIs, authentication flows, and CRUD operations following clean architecture practices.
• Gained practical experience in version control, debugging, deployment workflows, and collaborative software development.