Pediredla Venkata Satya Prasanth

Email: pvsprasanth0209@gmail.com Mobile:- +91 7815971664
Linkedin: linkedin.com/in/pvs-prasanth/
Github: github.com/pvsp2003
Portfolio: pvsp2003.github.io

Education

- **Manipal Institute of Technology** — Manipal, Udupi, India
  Bachelor of Technology in Information Technology; CGPA: 7.55 — *2021 – 2025*
- **Aditya Junior College** — Kakinada, Andhra Pradesh, India
  Intermediate Education; 92.5% — *2019 – 2021*
- **Aditya High School** — Kakinada, Andhra Pradesh, India
  Secondary Education; CGPA: 9.8 — *2019*

Technical Skills

- **Languages**: Python, Java, C, C++
- **Full Stack Development**: Django, FastAPI, flask, HTML, CSS, JavaScript
- **Tools & Platforms**: Git, Github, Android Studio, Talend, RapidMiner, Overleaf
- **Artificial Intelligence** : Machine Learning, Neural Networks, Transformers, Scikit-learn
- **Databases**: MySQL, SQLite, MongoDB, Redis

Experience

- **Data & AI Intern, Agratas A Tata Enterprise**: Jul – Present 2025
  - Fine-tuned a large language model for Chinese-to-English translation in the manufacturing context; built a full-stack application with intuitive UI, backend database storage, SSO login, and deployed via Docker.
  - Automated weekly EV and ESS market intelligence reports by web scraping data on defined players and regions, streamlining reporting and accelerating delivery cycles.
  - Compiled executive and organizational competitor reports by extracting project updates from external sources, enabling leadership to track industry developments and competitor strategies with greater clarity.
- **Research Intern, Multimodal Depression Prediction, Manipal Institute of Technology**: Jan – May 2025
  - Developed a hybrid AI system for student depression prediction by fusing Reddit mental health posts with structured survey data; tested on 50,000+ records for robust validation.
  - Designed a Deep Fusion Network combining sentence embeddings and structured features, improving accuracy by 4% over XGBoost, CatBoost, SVM, and MLP models.
  - Attained 91% accuracy; evaluated performance using AUC-ROC, confusion matrix, and interpreted results with SHAP visualizations.
- **AI Intern, Swecha - Summer of AI Program**: Jun – Jul 2024
  - Fine-tuned Whisper-large model on a Telugu speech dataset using Hugging Face Transformers for transcription.
  - Developed Python pipelines to clean, segment, and batch audio data for efficient model training.
  - Achieved a Word Error Rate (WER) of 0.0670 and Character Error Rate (CER) of 0.0453, demonstrating strong accuracy.

Projects

- **CanvasMarket**: An online platform for small artists to showcase their artwork, manage orders, and sell directly to customers.
  - Built a role-based web application with secure OAuth2 authentication and complete CRUD operations for artists and admin.
  - Automated custom order tracking, review flow, and payment state transitions.
  - Configured SMTP email automation for account events, order updates, reviews, and password reset functionality.
  - Collaborated in an Agile team, contributing to sprint planning, development tasks, and daily Scrum meetings.
  - **Technologies:** Django, HTML, CSS, JavaScript, SQLite, SMTP
- **QuizEase**: Accessible quiz platform implemented using Human Computer Interaction principles to support inclusive learning through voice and visual interaction.
  - Designed progressive question flow with real-time validation to enhance user engagement and reduce cognitive load.
  - Integrated Web Speech API for voice answering and text-to-speech narration, aiding users with visual or motor impairments.
  - Added light/dark mode, scalable text, and score graphs for better accessibility.
  - **Technologies:** Django, HTML, CSS, JavaScript, Web Speech API
- **CardioPredict**: Web-based clinical tool for early prediction of cardiovascular disease using machine learning.
  - Developed a web app to predict heart disease risk using a Random Forest model (93% accuracy) on clinical data.
  - Implemented SHAP-based visualizations to explain individual predictions.
  - Generated personalized PDF health reports with prediction with confidence scores, and configured automated email delivery.
  - **Technologies:** Python, Scikit-learn, SHAP, ReportLab, Matplotlib, Django, SMTP