Deivanai Saravanan

LinkedIn: linkedin.com/deivanai-saravanan
Gitlab: gitlab.com/deivanai
GitHub: github.com/deivanai
Email: deivanai0304@gmail.com
Mobile: +91 8884350063

Skills

- **Languages**: Python, Java , C, HTML, CSS, JavaScript, SQL, Haskell
- **Frameworks**: React, Rasa, NodeJS
- **Tools**: MATLAB, GIT, Tableau, MySQL, MongoDB, AutoCAD, LaTeX
- **Soft Skills**: Leadership, Collaboration, Adaptability, Time Management, Determined

Academic Qualifications

- **Amrita Vishwa Vidyapeetham** — Bangalore, India
  Bachelor of Technology - Computer Science & Engineering; Current GPA: 9.35 — *2022 - 2026*
- **Narayana PU College** — Bangalore, India
  CBSE 12th; Percentage: 94.6 — *2020 - 2022*
- **Sri Chaitanya Techno School** — Bangalore, India
  CBSE 10th; Percentage: 90 — *2020*

Projects

- **BUDS Crochet** — Team project
  Web Development, Real-Time Communication, API Integration — *Work in Progress*
  - A Collaborative Platform for Crafting, Sharing, and Exploring Crochet Patterns. Developing a comprehensive web application for crochet enthusiasts to create, share, and explore crochet patterns.
  - **Tech Stack**: React.js, Node.js, Express.js, MongoDB, JSON Web Tokens (JWT), Socket.IO, AWS, Vercel, Blender, Ravelry API
- **Predicting Osteoporosis Risk in Postmenopausal Women** — Team project
  EDA, Machine Learning, Explainable AI — *October 2024 - November 2024*
  - Conducted exploratory data analysis to uncover patterns and relationships in NHANES survey dataset. Designed a machine learning model to predict osteoporosis risk in postmenopausal women. Addressed class imbalance using SMOTE and enhanced data reliability through rigorous preprocessing. Implemented Explainable AI tools for better model interpretability.
  - **Tech Stack**: Python, Scikit-learn, LIME, SHAP
- **Budget Buddy** — Team project
  DBMS, Web Development — *November 2023 - December 2023*
  - Developed an web application that enables users to efficiently track income and expenses, maintain monthly budget, manage accounts, and achieve financial goals.
  - **Tech Stack**: React, Node.js, MySQL
- **HealthBot** — Team project
  NLU, Web Development — *July 2023 - October 2023*
  - Developed a web-based chatbot using the Rasa framework to help users identify potential diseases based on input symptoms.
  - Utilized an extensive medical dataset to develop a model that identifies potential diseases from user-input symptoms, displaying descriptions, symptoms, and precautions for each identified disease.
  - **Tech Stack**: MongoDB, React, Node.js, Express.js, CSS, Rasa

Honors and Achievements

- **TalentSprint Women Engineers (WE) Program (Cohort 5 Scholar) Supported by Google**
  Technical and Leadership Development, Corporate Readiness — *2023 - 2025*
  - Secured a spot among the top 1% of scholars from more than 22,000+ eligible applicants across the country.
  - Gained expertise in programming, problem-solving, and professional skills to excel in tech-driven roles.

Publications

- **An Automated 2D Octic Order Triangular Mesh Generator in MATLAB for Sustainable Solutions through Finite Element Scheme** — ES Journal
  Mesh Generation, Finite Element Analysis, MATLAB — *2025*
  - Automated mesh generation using octic order triangular elements for various two-dimensional domains. The proposed meshing technique is useful in engineering applications where complex geometries with internal voids need to be meshed for finite element analysis.
- **Classification of Structures and Monuments Based on Indian Architectural Style** — Under Publication
  Machine Learning, Deep Learning, Image Processing — *2025*
  - Used Histogram of Oriented Gradients (HOG) for feature extraction and utilizes classification models like Logistic Regression, Random Forest, XGBoost, DenseNet, and InceptionV3. DenseNet achieved an 86% accuracy rate in identifying architectural styles, making it the most effective among the models tested.

Extra-Curricular Activities

- Technical Lead at **Google Developer Groups On Campus (GDGoC ASEB)** — 2024 - 2025
- Treasurer at **CodeChef ASEB** — 2024 - 2025