



M MUTHU SELVAM

mm6846@srmist.edu.in | 8939710456 | 2026

B.Tech, Computer Science and Engineering

Address : 5th Karikala Cholan Street Grandylan Maharaja Nagar
Chennai 52



Summary

AI Software Developer / Python Developer with hands-on experience designing, training, and deploying machine learning and inference systems using Python, TensorFlow, PyTorch, and Scikit-learn. Strong foundation in data structures, algorithms, and backend development using Flask and REST APIs. Delivered end-to-end solutions for image classification and predictive analytics with focus on data preprocessing, model evaluation, and performance optimization. Passionate about building scalable AI-driven applications, writing clean and efficient code, and continuously improving engineering skills.

Education

SRM IST-Ramapuram

B.Tech · Computer Science and Engineering

2026

CGPA - 7.44/10

Velammal Vidhyashram

Class XII - CBSE · Bio Maths · Chennai

2022

Percentage - 71.8%

Velammal Vidhyashram

Class X - CBSE · Science · Chennai

2020

Percentage - 67.8%

Experience

Dexian

AI Python Developer Intern · Internship (Full-time, Onsite)

Oct 2025 - Present

Chennai, Tamil Nadu, India

- Building a Python + Flask platform with REST APIs, MySQL data workflows, and secure authentication for a Government of Madhya Pradesh project.
- Developing NLP / Chatbot features for automated assistance and smart user interactions using AI/ML models.
- Supporting testing, debugging, deployment, and Agile-based development with Git to ensure scalable backend architecture.

Projects

Generated Image Detection Identifies Synthetic Patterns and Authenticity

· YOLO,CNN,TensorFlow,PyTorch,REST API's

Apr 2025 - May 2025

AI and Deep Learning

- Developed a deep learning pipeline to detect AI-generated images (StyleGAN2, ProGAN, DFDC) with 92.6% accuracy using CNNs + Vision Transformers.
- Deployed a production-grade Flask REST API microservice for real-time inference, processing 1000+ images per minute.
- Boosted robustness by 28% in compressed/low-res samples via artifact analysis, DCT filtering, and color-space feature extraction.

Oncology Prediction and Prognostication

· CNNs,RNNs,SVM,Neural Networks

Apr 2025 - May 2025

AI and ML

- Engineered an end-to-end machine learning pipeline combining CNN (medical imaging), RNN (patient time-series), and SVM (feature-based classification) for cancer risk scoring, early diagnosis, and clinical decision support.
- Improved model accuracy and reliability through hyperparameter tuning, cross-validation, and ROC-AUC/F1 evaluation, ensuring production-grade diagnostic performance for healthcare deployment.

Diabetes Prediction System

· Python Pandas Numpy, Scikit-learn, SVM, Matplotlib

Nov 2024 - Dec 2024

AI and ML

- Developed a predictive analytics model using 1000+ real patient records with clinical indicators (BMI, BP, glucose, etc.) for early diabetes risk detection and preventive healthcare insights.
- Boosted model performance via feature engineering, scaling, GridSearchCV, and data visualization dashboards, making the solution deployment-ready for healthcare analytics systems.

Links

[LinkedIn](#), [GitHub](#), [GitHub](#)

Skills

Languages and Frameworks: Python, C, JavaScript, Flask, REST APIs, SQL
Tools and Technologies: Git, GitHub, Cursor AI, VS Code, Postman, pgAdmin
Technical Skills: Prompt Engineering, OpenAI API, Cursor AI, Gemini AI, Stable Diffusion, DALL-E

Publications

Generated Image Detection Identifies Synthetic Patterns and Authenticity Apr 2025
Conference Paper
Conference Paper — International Conference on Sustainable Energy and Innovation Technology
• (ICSEIT 2K25), Apr 11–12, 2025
• ISBN: 978-93-342-0319-6
• Published research on AI-generated image detection using CNNs, Vision Transformers, and GAN-forensic analysis for authenticity verification and synthetic artifact identification.
• Demonstrated strong results in deepfake detection, computer vision security, and visual pattern recognition for safeguarding digital media integrity.

Certifications

Artificial Intelligence Fundamentals | [Link](#) Aug 2025
IBM SkillsBuild · PWID-B0133500
Prompt Engineering for AI Systems | [Link](#) Sep 2025
Dubai Future Foundation · UxIBIvezGrvJ
GenAI Powered Data Analytics Job Simulation | [Link](#) Sep 2025
Tata and Forage · 5TqErv34n6CtW9d3S

Languages

English [Professional Working Proficiency], Tamil [Native Proficiency], Hindi [Fundamental Proficiency]

Volunteering

COMMUNITY CONNECT Jun 2024 - Jul 2025
Pivotal Role · Community Education and Development
• Led digital literacy and health awareness workshops for 200+ underserved individuals, improving community participation by 35% through strong communication and leadership.
• Coordinated outreach programs with NGOs and schools to support education access and social impact initiatives.
Anbagam - Old Age Home Jun 2024 - Jul 2025
Volunteer · Practical Support
• Facilitated group engagement activities for seniors, improving emotional well-being for 10+ residents per session.
• Assisted with daily care and facility operations for 40+ residents, ensuring safety, comfort, and hygiene.

Extra Curricular Activities

Video Editing
Content Creation
Community Service
Badminton