# SAMINATHAN M

+91 8668058971 ◇ Chengalpattu

[saminathan9102003@gmail.com](mailto:saminathan9102003@gmail.com) ◇ linkedin.com/in/saminathan910 ◇ saminathan.online

## OBJECTIVE

Aspiring Software Engineer with hands-on experience in scalable full-stack development, automation, and AI-enabled applications. Passionate about building human-centered products and solving real-world problems through collaborative development. Eager to contribute to high-performance systems and continuously learn in dynamic, innovation-driven environments.

## EDUCATION

**Bachelor of Engineering (B.E.) in Electronics and Communication Engineering**

Agni College of Technology                                                                                               2021 – 2025

## SKILLS

| | |
|---|---|
| **Languages** | Java, Python, C |
| **Web Development** | HTML, CSS, JavaScript, Node.js |
| **Databases** | MongoDB, SQL |
| **AI/ML** | OpenCV, YOLO, PyTesseract, Scikit-learn |
| **Tools** | Git, GitHub, Arduino, PyAutoGUI |
| **Practices** | Automation, Testing, Cloud-first Development |
| **Soft Skills** | Leadership, Team Collaboration, Problem Solving, Adaptability, Communication, Time Management |

## EXPERIENCE

**Network Engineer**                                                                                               Mar 2025 – May 2025

Izeon Innovative Pvt Ltd                                                                                               *Chennai, India*

- Achieved accurate network routing simulations across VLANs and subnets using Cisco Packet Tracer.
- Led configuration and troubleshooting of routers/switches with RIP, OSPF, NAT, and DHCP protocols.
- Developed and tested network topologies using CLI tools (ping, ipconfig, tracert, nslookup) and familiarized with OSI/TCP-IP models.

**Intern**                                                                                               Jan 2024 – Feb 2024

Tamil Nadu Cyber Crime Wing                                                                                               *Chennai, India*

- Achieved 95% accuracy in identifying suspicious review patterns using Python-based NLP analysis.
- Led the development of a review reputation analyzer that supported real-time digital fraud detection.
- Developed a secure review analysis system using Python, Flask, HTML, CSS, and JavaScript to aid investigation workflows.

**Intern**                                                                                               Aug 2023 – Oct 2023

Learn and Build                                                                                               *Remote*

- Achieved a 40% reduction in website load time by optimizing frontend performance and delivery.
- Led responsive UI design for cross-platform compatibility, boosting user engagement and accessibility.
- Developed interactive full-stack web features using HTML, CSS, JavaScript, Node.js, and MongoDB.

## PROJECTS

**Brain-Controlled Human-Computer Interaction System** [(Git Hub)](#)
Developed a real-time BCI system enabling hands-free computer control using EEG signals, achieving 92% classification accuracy with SVM. Engineered a signal processing pipeline and used PyAutoGUI for accessible intent-based interaction. *(Tech Stack: Python, NumPy, SciPy, Pandas, scikit-learn, PyAutoGUI, Arduino)*

**Uzhavan: Multilingual AI Assistant for Farmers** [(Live Link)](#)
Developed a multilingual AI-powered web app for farmers featuring soil testing, pest detection, crop management, and government schemes. Integrated dynamic language translation and visual aids to support low-literacy users. *Tech Stack: HTML, CSS, JavaScript, Python, Flask (planned), JSON, SQL*

**Object and Text Detection Application** [(Git Hub)](#)
Created an accessibility tool for visually impaired users with 90% text recognition and 85% object detection accuracy. Added real-time text-to-speech feedback. *Tech Stack: Python, OpenCV, PyTesseract, YOLO*

**Application Info Extractor with Flask** [(Live Link)](#)
Built a web scraper to extract and analyze application data with 98% accuracy and 50% reduced processing time. Improved logic for flexibility and scalability. *Tech Stack: Python, Flask*

## CERTIFICATIONS

- Frontend Development – IBM

- React Basics – IBM

- Python Programming – HackerRank

- Java Programming – HackerRank

- SQL – HackerRank

- Learning Analytics Tools – NPTEL

- Robotic Process Automation (RPA) – UiPath

## PUBLICATIONS

- **SCOPUS Journal:** *Intelligent Traffic Signal System for Ambulance Priority Using IoT* — JCHR
  [Read Publication]

- **IJSREM Review Paper:** *Advancements and Applications of Brain-Computer Interface Technology in Healthcare – A Review*
  [Read Publication]

## ACHIEVEMENTS

- Winner – Honeywell Youth India Teckathon: Built a Travel Personalization Bot

- Winner – Top 50 Team in the **Uzhavan Project**, selected from 28,000+ students at the **NIRAL Thiruvizha** Hackathon by the Government of Tamil Nadu.

- 3rd Place – Arduino Botics Competition, IIT Varanasi

- Finalist – TNCPL (Guvi)  and Vultr Cloud Challenge (GeeksforGeeks)