

J K Swaminathan

Recent B.Tech graduate in Electronics and Computer Engineering from VIT Chennai with hands-on experience in building web applications using **JavaScript, React, Node.js, and MongoDB**. Proficient in creating responsive user interfaces, integrating **REST APIs**, and deploying applications on cloud platforms like **Render** and **Vercel**. Currently enhancing frontend expertise through the **Meta Front-End Developer Professional Certificate**. Passionate about solving problems with clean, user-focused design and eager to contribute as a Frontend Developer

Contact

-  swaminathanjk@gmail.com
-  +91 8178518428
-  <https://github.com/Swaminathanjk>
-  www.linkedin.com/in/swamijk
-  <https://portfolio-swami-topaz.vercel.app/>

Academic Details

- Bachelor of Technology (B.Tech.) Electronics and Computer Engineering**
Vellore Institute of Technology, Chennai;
06/2025 | CGPA: 8.29
- Sri Vageesha Vidhyashram | Tiruchirappalli, Tamil Nadu**
12th | 04/2021 | 87%
- Suraj Bhan D.A.V Public School | Delhi, New Delhi**
10th | 04/2019 | 89%

Technical Skills

- Programming Languages:** JavaScript, Python
- Frontend:** React.js, HTML5, CSS3, JavaScript (ES6+), Redux, Context API, Material UI
- Backend:** Node.js, Express.js, MongoDB
- Security:** OAuth 2.0, JWT
- APIs:** RESTful APIs
- Tools:** Git, GitHub, Postman, VS Code
- Others:** Firebase, TensorFlow (basic), Blueprints (Unreal Engine)
- Currently learning:** Java, Spring Boot

Soft Skills

Analytical | Collaborative | Adaptable | Problem Solver | Effective Communicator | Creative Thinker | Time Management

Personal Details

- Date of Birth:** 22nd March 2003
- Languages Known:** English, Hindi and Tamil
- Address:** Tiruchirappalli, Tamil Nadu

Certificates

- C Language Training, IIT Bombay (Online)
- Python Language Training, IIT Bombay (Online)
- Cisco Packet Tracer Introduction.

Profile Summary

- Designed and deployed multiple MERN stack projects with features like role-based access control, AI integration, and cloud deployment, strengthening both frontend and backend development skills.
- Proficient in core frontend technologies (HTML5, CSS3, JavaScript, React) with additional experience in Node.js, Express, and MongoDB.
- Completed an internship at DRDO, contributing to simulation development and strengthening problem-solving and teamwork skills.
- Actively enhancing skills through the Meta Front-End Developer Professional Certificate and personal projects.
- Collaborative and adaptable, with strong analytical and communication abilities.

Academic Projects

- Military Asset Manager** (May 2025)
Tools: MERN Stack
 - Built a role-based access control system for managing military assets, enabling secure login, asset tracking, and admin dashboards.
 - Designed REST APIs with Node.js & Express for asset CRUD operations and integrated MongoDB for scalable data management
 - Link to website: <https://military-asset-manager-1.onrender.com/>
- AI-Powered Waste Sorting Assistant** (Jan 2025-April 2025)
Tools: React, Node.js, Express, MongoDB, TensorFlow, CUDA.
 - Implemented smart waste classification using TensorFlow models with real-time predictions, improving recycling efficiency through automated sorting.
 - Built and deployed a MERN-based website to visualize classification results, providing an interactive and user-friendly dashboard
 - Link to website: <https://waste-ui-1.onrender.com/>
- AI Task Manager** (Feb 2025-Mar 2025)
Tools: React (Vite), Node.js, Express.js, MongoDB, JWT Authentication, Render.
 - Developed a task management platform with JWT authentication and Google Gemini API for AI-powered task suggestions and productivity insights.
 - Link to website: <https://zocket-frontend.onrender.com/>
- MemeVerse** (Jan 2024 – Feb 2025)
Tools: React, Node.js, Express, MongoDB, JWT, Cloudinary.
 - Created an interactive meme-sharing platform with Cloudinary integration for image uploads, infinite scrolling, and secure user authentication.
 - Link to website: <https://memeverse-frontend.vercel.app/>
- Internship**
Defense Research and Development Organization (DRDO) | Delhi, New Delhi
September 2023 – November 2023
 - Collaborated on a project utilizing Unreal Engine to develop and enhance interactive simulations for defense applications
 - Assisted in the design and implementation of 3D environments, ensuring high-quality visual and functional standards.
 - Gained hands-on experience with Unreal Engine’s Blueprints and scripting tools, contributing to successful project milestones.