

ARAVIND GOVINDHASAMY

Full Stack Developer | IoT & RFID Systems

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PROFESSIONAL SUMMARY

Full Stack Developer with 4 years of hands-on production experience building backend services, web applications, and systems that connect software with hardware. Strongest in Python, FastAPI, Node.js, C#/.NET, React, SQL, Linux, MQTT, RFID, and Frappe/ERPNext. Currently building cloud IoT features at **Semicon Media**; previously developed campus systems at **PSGR Krishnammal College** and spent 2.5 years integrating RFID readers and kiosks with ILMS platforms at **2CQR Automation**. Learns through building, testing, debugging, and iterating until the complete system works reliably.

EDUCATION

Sri Ramakrishna Mission Vidyalaya College of Arts and Science <i>Master of Computer Applications (MCA) -- First Class with Distinction (CGPA: 8.0 / 10)</i>	Coimbatore, India 2022 -- 2024
Sri Ramakrishna Mission Vidyalaya College of Arts and Science <i>Bachelor of Science in Computer Science (B.Sc CS) -- First Class (CGPA: 7.46 / 10)</i>	Coimbatore, India 2019 -- 2022

TECHNICAL SKILLS

Backend: Python, FastAPI, Node.js, C#/.NET, REST APIs
Frontend: React, TypeScript
Data & Systems: PostgreSQL, MySQL, Linux, Git
IoT & Integration: MQTT, RFID, SIP2, Frappe/ERPNext

PROFESSIONAL EXPERIENCE

Full Stack Developer <i>Semicon Media Pvt Ltd (circuitdigest.cloud)</i>	Dec 2025 -- Present Coimbatore, India
- Build and maintain Circuit Digest Cloud, covering device provisioning, MQTT telemetry, dashboard APIs, and event-based alerts. - Develop asynchronous services with FastAPI, PostgreSQL (Supabase), and MQTT for sensor ingestion and device-facing APIs. - Built GeoLinker GPS tracking features including polygon geofencing, route history, and live React maps. - Integrated computer vision APIs for ANPR, helmet, object, and face detection alongside WebRTC video streaming. - Implemented Razorpay webhooks, Airtel M2M SIM lifecycle workflows, and Google Home OAuth integration. - Deploy and maintain the platform on DigitalOcean with GitHub Actions CI/CD and Sentry monitoring.	
ERP Assistant Programmer & Systems Engineer <i>PSGR Krishnammal College for Women</i>	Oct 2024 -- Nov 2025 Coimbatore, India
- Built and deployed an RFID smart campus gate system with synchronized camera snapshots for day-to-day student and staff access. - Developed a shared ID Card Tagging Module supporting HF, UHF, and QR credentials with duplicate detection and audit history. - Expanded GLPI IT Asset Management coverage across 1,800+ physical endpoints using FusionInventory auto-discovery. - Administered the college's Open Journal Systems (OJS) portal and supported its submission, peer-review, and publishing workflows. - Built SQL reports and scheduled daily summaries for movement and asset data used by college leadership.	
Software Developer -- IoT, RFID & Enterprise Systems (2.5 Years) <i>2CQR Automation Private Limited</i>	May 2022 -- Oct 2024 Coimbatore, India
- Built, deployed, and supported RFID library and enterprise software across 20+ university client sites. - Connected RFID gates and kiosks with INFLIBNET SOUL, KOHA, AutoLib, and eGranthalaya through database and SIP2 integrations. - Developed iSmartShelf and Smart Return DropBox systems using H002/H003 readers, ISO 28560 data models, optical sensors, and Razorpay payments. - Improved self-service borrow/return kiosks with anti-cloning checks, thermal printing, email notifications, and more reliable offline transaction handling. - Built and maintained retail ERP and attendance features using Node.js/Express, IIS WebAPI, and SQL, including bulk imports and query tuning. - Diagnosed and resolved 150+ production issues involving byte-level UID/CSN conversion, RS-232 timeouts, SQL deadlocks, and offline synchronization.	

SELECTED PROJECTS

BUDE RFID Inventory Platform <i>ERPNext, Frappe, Flutter, Dart, Python, RFID, Barcode</i>	Jun 2026 -- Present
Building warehouse inventory software that connects ERPNext/Frappe with a Flutter application for handheld RFID and barcode scanning, stock counts, transfers, and offline queuing.	
Daily Tech News Buddy <i>Next.js, TypeScript, Gemini API</i>	Apr 2026 -- Present
Built and self-hosted a web application that fetches and summarizes daily technology news using the Gemini API.	

HACKATHONS & COMPETITIONS

Inter-College Coding Hackathon (2nd Place / Runner-Up): Built rapid full-stack prototype under tight deadlines at Sri Ramakrishna Mission Vidyalaya College of Arts and Science (2023).
Inter-College PyGame Development Hackathon: Designed and implemented interactive real-time game architecture using Python and PyGame, competing against regional engineering colleges (2021, 2022).

CERTIFICATIONS

National Cadet Corps (NCC) 'B' & 'C' Certificates -- NCC India (2019 -- 2022)
Azure IoT Hub: Telemetry & Stream Analytics -- Coursera (2025)
Programming Using Python -- HCL GUVI (2022)