

Abey Joshy

+353 892119325 | abeyjoshyofficial@gmail.com | Galway, Ireland

<https://www.linkedin.com/in/abeyjoshy>

SUMMARY

Software Engineer with 2.5+ years of professional experience developing and supporting production backend systems and real-time data-processing services. Hands-on experience with Node.js, JavaScript, Python, REST APIs, PostgreSQL, MongoDB, RabbitMQ and distributed backend systems. Experienced in API integration, system troubleshooting, root-cause analysis, Linux environments, CI/CD and production deployments. Built and supported mission-critical services for a large-scale national emergency-response platform. Holds an MSc in Information Systems Management (First Class Honours) from the University of Galway.

SKILLS

- **Software Development & Distributed Systems**

Node.js, JavaScript, Python, REST APIs, Backend Development, Microservices, Distributed Systems, Scalable APIs, Real-Time Data Processing, API Integration, RabbitMQ, PostgreSQL, MongoDB, C/C++, C#, Software Testing, Debugging

- **Cloud, DevOps & Infrastructure**

AWS, Microsoft Azure, Linux, Docker, CI/CD, GitHub Actions, Git, Cloud Infrastructure, Virtual Machines, VMware ESXi, vCenter, Nginx, Load Balancing, Infrastructure Deployment, Shell Scripting

- **Engineering & Professional Skills**

Agile & Scrum, System Troubleshooting, Root Cause Analysis, Problem Solving, System Design, Technical Documentation, Project Management, Team Collaboration, Stakeholder Engagement

EDUCATION

- **MSc in Information Systems Management**

September 2025 – August 2026

University of Galway

Galway, Ireland

Grade: 1:1 First Class Honors

- **B.Tech (Hons.) in Electronics and Communication Engineering**

August 2018 – July 2022

APJ Abdul Kalam Technological University

Kerala, India

Grade: 86.7%

PROFESSIONAL WORK EXPERIENCE

Centre for Development of Advanced Computing (C-DAC)

February 2023 – August 2025

Software Engineer

Kerala, India

R&D Organization, Ministry of Electronics and Information Technology,
Government of India

- Designed and integrated Google Emergency Location Service (ELS) into the PAN India Next-Generation Emergency Response Support System (ERSS-112) by developing a centralized Node.js service with distributed backend modules using MongoDB and RabbitMQ for real-time location data processing.
- Engineered and benchmarked the ELS backend to sustain 1,500+ requests/second using Apache JMeter, identifying performance bottlenecks and validating scalability for a mission-critical production environment for ERSS-112.

- Developed backend services for integrating WhatsApp Business Platform into the ERSS system using Node.js and PostgreSQL, supporting automated messaging workflows and reliable API communication.
- Deployed and managed 30+ Linux virtual machines per state using VMware ESXi and vCenter, including server configuration, networking, application deployment and infrastructure troubleshooting.
- Supported server installation, configuration and deployment of ERSS-112, Women's Helpline (WHL-181) and Child Helpline (CHL-1098) across 10+ states in India, including on-site technical support and system training.
- Collaborated with development and infrastructure teams throughout the SDLC, including integration, testing, deployment, troubleshooting and production support.

ACADEMIC PROJECTS

- **ShiftFlow - Cloud Based Full Stack Workforce Scheduling Application**

(Cloud Computing Module Group Project - University of Galway)

Led end-to-end deployment of a full-stack serverless application on AWS Lambda, API Gateway, S3, and CloudFront. Implemented CI/CD pipeline using GitHub Actions for automated build, test, and deployment workflows.

- GitHub: [Link to Project](#)

- **Point of Sale (POS) System - C# Windows Forms Application**

(Business Application Programming Module Project - University of Galway)

Developed a desktop-based POS system using C# and Windows Forms as part of a business application programming module. Implemented core functionalities including product management, billing workflow, and transaction processing with a focus on application stability and business usability.

- GitHub: [Link to Project](#)

- **IoHT-Enabled Real-Time Patient Monitoring System using Non-Invasive Sensors**

(Final Year Project – APJ Abdul Kalam Technological University)

Designed a prototype for real-time patient monitoring system using non-invasive sensors by utilizing Internet of Healthcare Things (IoHT) architecture along with integrated gesture-based room automation system for the bedridden patients using OpenCV.

- IEEE Publication: DOI: [10.1109/ICRITO56286.2022.9964893](#)

ACHIEVEMENTS & CERTIFICATIONS

- **AWS Cloud Practitioner (CLF-C02)** February 2026
DataCamp | [View Certification](#)
- **Microsoft Azure Fundamentals (AZ-900)** February 2026
DataCamp | [View Certification](#)
- **Employability Award** December 2025
University of Galway | [View Certification](#)
- **Blended Intensive Programme (BIP) on Leadership Development** May 2026 - July 2026
University of Antwerp, Belgium
Represented the University of Galway in the Erasmus+ BIP on Leadership Development at the University of Antwerp, collaborating with students from universities across the world.