

Aiswarya Koonakkampilly Sunilal

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PROFESSIONAL SUMMARY

Software Developer with hands-on experience in full-stack development, cloud-native applications, and test automation. Skilled in Java, Spring Boot, React, Docker, and Kubernetes. Proven track record of delivering scalable solutions and optimizing performance in Agile environments.

EDUCATION

Dublin Business School, Ireland

Dublin, Ireland

Master of Science in Information Systems with Computing

Expected Graduation: Sept 2026

Expected Grade: First-Class Honours (90%+)

- Planned Final Year Dissertation Topic: **Artificial Intelligence in Enterprise Systems** – research focus on the integration of generative AI and large language models (LLMs) into business information systems.
- Active member of DBS Tech society.

APJ Abdul Kalam Technological University

Kerala, India

Bachelor of Technology in Computer Science and Engineering (**CGPA: 8.51/10**)

2019 – 2023

- Published "*Gesture Recognition using AI/ML*" in IEEE Conference (2023).
- Built a **Sign Language Recognition System** (CNN + OpenCV), achieving 90% accuracy.
- Developed an **Interview Preparation Portal** with Java Spring Boot, Hibernate/JPA, MySQL, React, Docker; deployed via Render & Railway (95% uptime).

EXPERIENCE

Baton Systems (FinTech Product Company)

Chennai, India

Software Developer — Collateral Management

Mar 2024 – Jul 2025

- Developed and enhanced **collateral allocation** and **eligibility workflows** on the **Core-Collateral** platform using **Spring MVC**, **Hibernate**, and **Oracle SQL**, supporting **real-time settlement** and **liquidity optimization**.
- Built secure **RESTful APIs** for data exchange between **CCPs**, **custodians**, and internal treasury systems to enable margin calls and **STP (Straight-Through Processing)**.
- Migrated legacy services to a **microservices-based architecture**.
- Optimized **SQL queries** (100+ records) through **indexing/partitioning**, cutting query cost by **30%**.
- Automated margin call notifications and reconciliation pipelines using **CRON jobs** and **Rocker templates**, reducing manual effort by **60%**.
- Deployed and monitored **microservices** with **Docker**, **Kubernetes**, and **Jenkins CI/CD**, ensuring resilient and event-driven processing.
- Integrated **Apache Kafka** for event-driven communication between microservices, enabling scalable and fault-tolerant processing of collateral events and margin call workflows.
- Built dashboards in **QuickSight** and **Apache Superset** for real-time visibility of collateral flows, exposure, and liquidity risk metrics.
- Collaborated with business and operations teams to align technical solutions with **regulatory compliance**, **margin efficiency**, and risk objectives.
- Contributed to resolving **production issues** by analyzing logs, debugging services, and collaborating with senior developers to ensure timely fixes and system stability.
- Mentored interns on secure API design, collateral domain workflows (eligibility, margin call, settlement), and debugging.

SOTI Inc. (Product-Based Company)
Software Developer in Test

Kochi, India
Jul 2023 – Mar 2024

- Designed a **BDD automation framework** using **SpecFlow** and **Selenium WebDriver**, boosting coverage by **45%**.
- Automated **RESTful API testing** with **RestAssured.net**, improving efficiency by **30%**.
- Integrated tests into **CI/CD pipelines** with **Jenkins** and **Git**, enabling faster releases.
- Collaborated on complex testing plans with cross-functional teams for full coverage and timely delivery.
- Participated in **Agile ceremonies** (sprint planning, stand-ups, and retrospectives) to drive team alignment.
- Maintained detailed **test documentation** (plans, cases, reports) for traceability and compliance.

PROJECTS

Automated Container Deployment in the Cloud

- Provisioned cloud infrastructure using **Terraform** and **AWS CloudFormation** to deploy secure EC2 instances.
- Automated server configuration with **Ansible**, including Docker installation and system environment setup.
- Containerized a sample web application using **Docker**, deployed via infrastructure-as-code scripts.
- Integrated a CI/CD pipeline using **Azure DevOps** and **GitHub Actions** for seamless deployment on code push.
- Documented architecture, deployment flow, and tooling rationale in a comprehensive technical report with diagrams.

AGROMED

- Built a **Flutter** app for pest detection using **TensorFlow CNN** (**87% accuracy**).
- Integrated **GPS** to suggest nearby fertilizer stores based on **ML output**.
- Finalist at **Vaiga Agri Hackathon 2021, Govt. of Kerala**.

SwiftPay – Banking Software

- Built a SWIFT-compatible banking system using **Spring Boot**, **Docker**, and **AWS**, capable of handling **1000 TPS**, optimizing transaction speed and security.
- Enhanced concurrency and multi-threading performance by implementing **ExecutorService**, improving system responsiveness under high load.

Interview Prep Q&A Portal

- Developed a collaborative portal with categorized **Q&A**, peer feedback, and progress tracking.
- Stack: **Spring Boot**, **Hibernate**, **MySQL**, **REST APIs**, **React**, **Docker**; deployed via **Render & Railway**.

TECHNICAL SKILLS

- **Languages:** Java, Python, JavaScript, SQL, HTML, CSS
- **Frameworks & Libraries:** Spring Boot, Hibernate, React, Node.js
- **Testing:** JUnit, Mockito, Selenium, Postman, RestAssured
- **Databases:** MySQL, MongoDB
- **Cloud Platforms:** AWS (EC2, S3, RDS, Lambda, QuickSight)
- **DevOps Tools:** Docker, Kubernetes, Jenkins, Terraform, Git, GitHub Actions, CI/CD ,Ansible
- **Monitoring & Logging:** Grafana, Kibana, Superset
- **Messaging & Integration:** IBM MQ, ActiveMQ, REST APIs
- **Methodologies:** Agile, Scrum,Kanban, TDD, BDD, SDLC, Version Control
- **Core CS Concepts:** Data Structures, Algorithms, OOP, Design Patterns, Database Design

ACHIEVEMENTS

- **Hackathon Finalist:** Participated in **5 national-level hackathons** with **100+** teams, including **Vaiga Agri Hackathon** and **Rural AgriHack 2022**, organized by the **government**.

- **Top 5 in CICADA:** Ranked among 1,000+ participants in a premier national-level coding competition.
- **Technical Recognition:** Earned HackerRank Golden Badges in Python (50+ problems solved) and Problem Solving (70+ problems).
- **Leadership:** Promotion Lead for Beach Hack 2022 & 2023; pitched in 60+ colleges, executed 10+ campaigns, and led a 5-member team to drive 100+ registrations.
- **Mentorship:** Trained 40+ high school students in Python programming during Jumpstart 2022, organized by IEDC Kerala subsection.

CERTIFICATIONS

- **AWS Cloud Practitioner Essentials** – Amazon Web Services (2025)
Scored 86% in module assessments; covered cloud concepts, security, architecture, pricing, and support.
- **Introduction to Cloud Computing** – IBM (2025)
Scored 82% in course evaluations; gained knowledge of cloud models (IaaS, PaaS, SaaS), virtualization, containers, and cloud services.
- **Generative AI: Prompt Engineering Basics** – IBM (2025)
Achieved 88% in final assessment; mastered core techniques of prompt engineering for LLMs with AI/ML applications.