Sivaganesh Balaganesh

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EDUCATION

Purdue University	Sept 2025 - May 2027
Master of Science in Computer Science	West Lafayette, IN
Anna University	Aug 2018 - June 2022
Bachelor of Engineering in Computer Science & Engineering (Honours) **(GPA: 9.2/10.0)**	Chennai, India

TECHNICAL SKILLS

Languages	Java, Python, C, C++, TypeScript, JavaScript, PHP
Frontend Technologies	Angular, React, React Native, Vue, Redux, NgRx, Expo, HTML, CSS, Bootstrap
Backend Technologies	Spring Boot, Flask, Node.js, REST, GraphQL, FastAPI, Django
Databases & Cloud	SQL (MySQL, PostgreSQL, Oracle), NoSQL (MongoDB, Firebase), GCP, AWS, Vercel
DevOps & Tools	Git, Jenkins, Docker, Kubernetes, SonarQube, Sonatype, Checkmarx, Maven, Postman, Splunk

WORK EXPERIENCE

Visa, Bangalore, India — June 2022 - July 2025
Senior Software Engineer

- Led the end-to-end development of a Data Subject Rights (DSR) handling application to enable customer data access, modification and deletion, leveraging a **microservices** architecture with **React, Java, Spring Boot**, and **MySQL**.
- Contributed to developing a PII tracking portal with **React**, **Redux**, **TypeScript**, and **Node.js**, achieving 85% UI test coverage with **React Testing Library (RTL)** and ensuring full accessibility compliance (**WCAG** & VGAR).
- Migrated the legacy **Spring** backend with direct **JDBC** queries to a **Spring Boot microservices** architecture (**JPA/Hibernate, Spring Security, Spring Actuator, REST APIs**) improving scalability and security.
- Developed unit, integration, and functional tests for backend services and microservices using **JUnit** and **Mockito**, achieving **85%+ code coverage** and ensuring high reliability and maintainability across applications.
- Led a low-downtime migration of **~1M records** in **MySQL** from a legacy, non-normalized database, and designed new schemas with normalization, stored procedures, triggers, and views to support new feature development.
- Developed scheduled jobs with **OneTrust** APIs and **LDAP** to automate data sync, user updates, and stale account identification, adding reminder notifications with escalation workflows using **Apache Kafka**.
- Migrated encrypted DSR files from **MySQL** to **AWS S3** for faster access and archival.
- Set up and maintained the DRUM infrastructure and deployed the applications to **JBoss Web Server (JWS)**, implementing automated **CI/CD pipelines** with **Jenkins**, **Artifactory**, and **RPM** for reliable deployments.
- Configured QA, pre-production, and production environments, including secondary data center, with separate backend/frontend servers, **reverse proxy** servers, and **LTM/GTM load balancers**, integrating **Cloudflare** for secure access, enhancing scalability and reliability.

Citicorp, Chennai, India — May 2021 - July 2021
SDE Intern

- Developed an interactive dashboard for visualizing release metrics using the **eCore Java framework**, implementing real-time data rendering, filters, and summary statistics to support engineering and management decision-making.
- Performed **JUnit** testing on all frontend and backend components of the dashboard and achieved **80% code coverage**.

Data Centre, Madras Institute of Technology, Chennai, India — Jun 2020 - April 2022
Software Developer Intern

- Led a 6-member team to build a full-stack departmental portal using **Angular, Node.js, GraphQL**, and **MySQL**, delivering modules for academic management, placements, research, and an anonymous student feedback system.
- Optimized backend deployments by containerizing and scaling multiple backend services with **PM2** on a single server, resulting in higher availability, efficient query resolution, and reduced downtime during updates.

PROJECTS

SplitLLM (https://splitllm.vercel.app) | **React, Python Flask, MongoDB, GCP, LLM, Gemini**

- Built an expense tracker with an AI-powered chatbot and automated bill-splitting using the graph-based minimize cash flow algorithm, leveraging MongoDB aggregations to cut query time from 2 minutes to under 5 seconds.

Cloud-Clip (https://cloud-clip.vercel.app**) | React Native, Expo, Firebase**

- Developed a cross-platform clipboard management app for web, Android and iOS, optimizing Firestore with custom indexes and real-time sync for faster queries and a seamless multi-device experience.

EXTRACURRICULARS

- Co-founded an edTech startup **Bauble**, developing a web portal connecting 150+ students with alumni volunteers across universities.