

Saksham Gupta

Passionate Software Engineer exploring Modern Technologies, Programming Paradigms and Innovative Solutions

📍 Bengaluru ✉️ sakshamdham54321@gmail.com ☎️ +91 8687-667561 🌐 sakshamgupta28 🔄 Omega28

Skills

Languages: Java, JavaScript, C++, Bash | *Familiar:* Python, Rust, Haskell

Backend: Helidon, REST API design, DSL design (external/internal), workflow/orchestration

Frontend: Preact, React, Web Components, JSON-driven UI/rendering

GenAI: RAG, LangChain, vector search / embeddings

Observability & Performance: OpenTelemetry, profiling (IntelliJ Profiler, VisualVM), CPU sampling

Education

Indian Institute of Technology, Roorkee BTech, Computer Science

2018 - 2022

- **GPA:** 8.42 ([Degree](#))
- **JEE (Advanced):** AIR 353 ([Result](#))
- **Capstone Project:** ([GitHub](#)) Built a CPU Simulator written in C++ simulating Out-of-order (O3) execution using Scoreboarding with branch prediction capabilities based on a RISC-V-inspired instruction set.

Experience

Oracle, Project Lead [**Accelerated Promotion**]

Bengaluru, IN Oct 2025 - Present

- Designed **Siebel Open Integration – Phase 2**, defining the end-to-end architecture for a DSL-driven **integration orchestration framework** spanning REST, eventing, and Siebel Objects execution.
- Designed the **External DSL** and corresponding **Internal DSL** model for workflow composition (steps, transitions / conditions, input/output/global state), enabling **declarative configuration**
- Led end-to-end architecture, design, and delivery of **Siebel Web Component Framework** enabling Presentation Model driven UI rendering via JSON configuration, reducing reliance on Physical Renderers and improving UI extensibility.
- Designed and built a **framework-agnostic UI rendering engine** with **recursive JSON layout grammar** (OJET-integrated) with a composable runtime binding/expression layer for Siebel data/properties/actions, delivering reactive updates, strong validation, debuggability, and performance optimizations.

Oracle, Senior Software Engineer

Bengaluru, IN Sept 2024 – Sept 2025

- Designed the architecture for a **RAG system on Siebel Bookshelf** and led a team of two developers to implement it, leveraging vector databases, LLMs, and LangChain for intelligent document retrieval.
- Automated **Third-Party JavaScript Upgrade** by integrating package.json-based version tracking eliminating manual downloads and reducing human effort.
- **Designed the API architecture** for UI artifact exposure via REST endpoints for **Open Integration** and mentored a new team to implement it, transitioning ownership.
- **Integrated Preact into a legacy frontend system**, handling bundling, loading, and component development using VDOM and WebComponent architecture.
- **Integrated a modern flow-based template system** for guided processes flows into Siebel OpenUI.
- Explored **Observability tools** like **OpenTelemetry** to enhance system monitoring and debugging.
- Migrated **Siebel Open Integration Java 17 Reactive** application to **Java 21**, leveraging Virtual Threads.

Oracle, Software Engineer

Bengaluru, IN Aug 2022 – Aug 2024

- Built and delivered **Siebel Open Integration** from scratch.
- Led the **Siebel Open Integration** project from **Proof-of-Concept** to **beta** within a time frame of 12 months.

- Refactored client-side JavaScript with extensive business logic to run seamlessly in the **GraalVM JavaScript Polyglot Context**, and integrated it into a **Helidon Java application** enabling server-side execution
- Exposed **CRM artifacts** and functionalities through REST APIs with **Java Helidon framework**. The framework also provides a user-friendly **domain-specific language (DSL)** for interacting with CRM artifacts.
- Optimized JavaScript code to **reduce CPU usage by 60% and API latency by 75%**.

Oracle, Application Development Intern

Remote, IN Aug June 2021 – July 2021

- Built **custom reusable components using Oracle Visual Builder** (Internally uses OJET) for Siebel CRM REST APIs.
- Built a web app for demonstration using the reusable components.

Professional Achievement




- **CXI FY25 Q3 "Agency in Action" Award** Played a key role in enhancing UX Web Component Framework by resolving 25+ compliance and accessibility issues, directly supporting critical DBE 25.6 deliveries.
- **CXI FY25 Q3 "Continuous Innovation" Award** Built an innovative solution for automating JavaScript related 3rd Party upgrades for Siebel OpenUI
- **CXI FY24 Q4 "Continuous Innovation" Award** Built Siebel Open Integration from scratch for exposing REST API for Siebel objects, reused Siebel OpenUI front end proxy object layer as a server side multi user module using GraalVM JavaScript Polyglot in Java Helidon service.
- **Reached top 6 in a global hackathon around Generative AI (Oracle) 2024** in the organization in which 101 teams participated from different parts of the world.

Position of Responsibility

- **Mentor (IIT Roorkee) Certificate** [🔗](#) Mentored group of five freshman to help succeed in their undergrad curriculum
- **Co-Coordinator (Cognizance, IIT Roorkee) Certificate** [🔗](#) Organized coding and tech competitions as a part of annual tech fest of IIT Roorkee, Cognizance.
- **Department Placement Representative, Computer Science** Managed the placement process for computer science students, coordinating company visits and overseeing interview scheduling for various recruiters.

Personal Projects

- **SAVY - Watch video in sync** (JavaScript) ([GitHub](#) [🔗](#))
 - Real-time video synchronization web application using Node.js and Socket.io.
 - SAVY allows users in a virtual room to watch the same local video file in sync.
 - Audio chat functionality using WebRTC.
- **OS From Scratch** (C) ([GitHub](#) [🔗](#))
 - A 32-bit UNIX clone kernel written from scratch with our own bootloader implementation.
 - The kernel handles interrupts, keyboard input, virtual memory, has a basic memory manager to allocate/de-allocate memory and a VGA display driver.
 - The kernel is also multi-boot compliant and has a basic shell.
 - The kernel is written in C, bootloader in x86 assembly, QEMU is used as emulator to boot the OS.
- **Pay Me: Online Payment System** (Java) ([GitHub](#) [🔗](#))
 - A Java GUI application utilizing MySQL to create a robust banking application enabling the user to make payments.
 - User can see their transaction history and can raise issues from the application.
 - Admin can see all the transaction history and can resolve the issue provided by the user.
- **CacheCraft** (Java) ([GitHub](#) [🔗](#))
 - CacheCraft is a comprehensive repository dedicated to the implementation and study of various caching mechanisms and design patterns.

- This project aims to provide a learning platform for developers to understand and apply different caching strategies and design patterns in real-world scenarios.
- **JsonParser** (Java) ([GitHub](#) )
 - JSONParser is a lightweight Java-based library designed to parse JSON strings into their corresponding Java objects.
 - It supports parsing JSON objects, arrays, strings, numbers, boolean values, and null values built using recursive descent parsing.
- **HttpProxy** (C++) ([GitHub](#) )
 - A minimal HTTP proxy server written in C++, using RAI for socket safety and custom URL parsing. The proxy accepts client connection, parses an HTTP request, and forwards it to the remote host, returning the response back to the client.
- **Math Expression Evaluator** (Java) ([GitHub](#) )
 - A lightweight, self-contained expression parser & evaluator implemented in pure Java using functional parser-combinator techniques.