

PERSONAL SYNOPSIS

Innovative and technically proficient software developer. Contributing effectively within cross-functional teams to drive project success. A complex problem solver with a strong analytical mindset and a goal-oriented approach.

EXPERIENCE

•WorldRef (1YR 1M)

July 2024 - Aug 2025

SDE Intern

New-Delhi

– Collaborated closely with the product manager, developers, and quality analysts to enhance product capabilities and deliver robust technical solutions.

– Developed production-ready RESTful APIs in Java and Spring Boot for both mobile and web applications.

– Engaged in continuous collaboration with developers to meet project requirements.

– Reviewed project specifications and designed technology solutions that met or exceeded performance expectations.

PROJECTS

•AI-Lingua: Media-Driven Language Learning Platform

April 2025 – Present

Link

– **Project Description:** A hybrid Java–Python system that transforms real media (MKV/MP4/audio) into a learning experience. It extracts official/embedded subtitles, generates simplified subtitles aligned to CEFR levels, and produces scene previews, post-scene recaps, and quizzes to reinforce vocabulary and grammar.

– **Technologies Used:** Java Spring Boot, Python FastAPI, FFmpeg/FFprobe, Google Gemini, Shell scripting

– **Key Features:**

- CEFR-aligned simplification with semantic fidelity across original and simplified subtitles

- Embedded subtitle extraction via FFprobe/FFmpeg; robust SRT parsing/writing

- Scene segmentation with educational overlays: previews (context + simple words) and recaps (vocab, phrases, grammar)

- Quiz generation from scene elements with design for IRT-based difficulty calibration

- MPV integration for overlay display and interactive playback configuration

- Secure JavaPython communication with HMAC-signed JSON and reproducible run scripts

•Worldref Backend Development

July 2024 - Aug 2025

– **Project Description:** A Tech Driven, cross border, B2B procurement Marketplace for Process and utility plants.

– **Technologies Used:** Java Rest APIs, Spring Boot, MySQL

– **Key Features:**

MROHub

For MRO Procurement, RFQ generation for Catalogued Products, Live order tracking, Product Purchase History, Option to onboard sellers and procure through app.

– Developed the complete Buyer Profile module, implementing RESTful API logic for data creation and modification at the production level.

BuyerDMS

Auto RFQ Matching transmittal to Sellers for Non-Catalogued products.

SellerDashboard

A dedicated portal for sellers to generate and edit quotations, and manage deals.

– Developed a Quotation service , optimizing the initial codebase to reduce response times by up to 20%, decrease code complexity by up to 40%, and significantly improve readability.

Tools : Spring MVC, MySQL

EDUCATION

*B.Tech, Computer Science and Engineering (ML Specialization)

Guru Gobind Singh Indraprastha University

CGPA: 8.31

2021 – 2025

*Senior Secondary (XII)

CRPF Public School, CBSE

Percentage: 93.6%

2020

*High School (X)

CRPF Public School, CBSE

Percentage: 93.0%

2018

KEY COURSES TAKEN

* **Machine Learning:**

- Reinforcement Learning and Deep Learning
- Pattern Recognition and Computer Vision
- Machine Learning

ACHIEVEMENTS AND CERTIFICATIONS

* **Hacktoberfest Contributor**

Contributed to the Kestra open-source plugin-serdes module by improving error-handling semantics for the `OnBadLines` configuration. Implemented and validated support for `ERROR`, `WARN`, and `SKIP` behaviors to ensure predictable data ingestion and safer pipeline execution. Changes were reviewed and merged via [Issue #80](#) and [PR #214](#).