

KARTHICK V

Software Engineer | Systems, Backend & Performance

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PROFESSIONAL SUMMARY

Computer Science undergraduate graduating in 2027 with hands-on experience building backend and data-intensive systems. Designed a high-throughput aggregation platform processing 15K+ records per day from 160+ independent sources using 20+ concurrent workers, content-hash deduplication, Redis caching, rate limiting, and fault-tolerant retries.

TECHNICAL SKILLS

Languages: Java, C, Python, SQL, JavaScript

Systems: Linux, Concurrency, Multithreading, Networking, Performance Optimization

Databases: PostgreSQL, MySQL, Redis, MongoDB, SQL, Caching, Data Modeling

Backend: FastAPI, Flask, REST APIs, GraphQL

Infrastructure & Tools: Docker, Git, Selenium, Linux Shell, ONNX Runtime, YOLOv8, n8n

EXPERIENCE

Ankor, Chennai — SDE and Analytics Intern

Jan 2025 – Sep 2026

- Developed and shipped 12+ backend features across 4 services, designing API contracts for 25+ endpoints and validating system behaviour through integration testing that raised suite coverage to 80%.
- Diagnosed and resolved 30+ production defects across backend services, tracing failures to root causes and delivering verified fixes with a median turnaround of under 2 days.

Freelance (Fiverr) — Technical Assistant

2024 – Present

- Built data collection, validation, and workflow automation tools with scripted integrity checks that sustained 99% accuracy across datasets containing 100K+ records.
- Analysed requirements and designed reliable solutions across 20+ client workflows under fixed deadlines, delivering 100% on time at a 4.9/5 average rating.

PROJECTS

Sherlock — High-Throughput Job Data Aggregation Platform

Python, Redis, Selenium, GraphQL

GitHub Link

- Designed a high-throughput aggregation platform ingesting 15K+ job records per day from 160+ independent sources using 20+ concurrent workers while handling heterogeneous schemas and intermittent upstream availability.
- Engineered content-hash deduplication that eliminated 35% overlapping postings across sources and built a relevance-ranking pipeline returning aggregated results in under 200ms per query.
- Built a fault-tolerant ingestion layer with Redis-backed caching, per-source rate limiting, and exponential-backoff retries, reducing redundant upstream requests by 60% and maintaining 99% pipeline uptime.

EARTHFIFY — Real-Time Waste Classification System

C? / Python, YOLOv8, ONNX Runtime, Flask

GitHub Link

- Built a real-time waste-classification service serving a 6-class vision model at 90% accuracy through a Flask API for webcam inference.
- Optimised the inference pipeline with ONNX Runtime, reducing latency from 110ms to 33ms (70%) and reaching 30 FPS on commodity CPU hardware.

Project Steve — Backend Workflow Automation Platform

FastAPI, JavaScript, n8n

GitHub Link

- Built a backend that compiles natural-language requirements into executable automation workflows, generating runnable pipelines across 30+ node types with 85% validity on first execution.
- Designed a modular pipeline for requirement parsing, validation, and workflow assembly, exposed through 15+ REST endpoints with structured error handling and graceful degradation.

Inspect Locker — Firefox Extension

JavaScript, WebExtension API

Published on Mozilla Add-ons

- Built and published a Firefox extension with 5+ downloads that persists DevTools inspect-element edits across reloads using a local-only storage model with zero external data transmission.

EDUCATION & ACHIEVEMENTS

B.E. Computer Science and Engineering — Saveetha Engineering College, Chennai

2023 – 2027

CGPA: 8.2 / 10

- Solved 300+ problems on LeetCode.
- Winner, CODE CRUSADE.
- Finalist, NASSCOM Technology, SIH ,
- Open-Source Contributor with 8+ merged pull requests.