

## Manas Gandotra

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### PROFESSIONAL SUMMARY

Full-stack developer focused on shipping small, measurable increments. Designs for speed (TTFB, render time), reliability (tests + CI), and maintainability (docs + PR hygiene).

### CORE SKILLS

TypeScript, React, Node.js, Express, REST/JSON, PostgreSQL, MongoDB, C++, Jest/Playwright/Vitest, Git, Docker/ CI /Vercel/Render, Authentication/ ORM /Tailwind

### PROJECTS

#### Museum of Ontario —Artifact Explorer (React + Node/Express + REST)

live: <https://exhibit-explorer.vercel.app/> repo: <https://github.com/gentleman654/exhibitExplorer>

- Built responsive artifact gallery + faceted search (title/era/type) with debounced queries; P95 search response
- Implemented infinite scroll + SWR/RTK-style cache (stale-while-revalidate) —**20%** fewer network calls.
- Added route-level code splitting; bundle
- Wrote contract tests against API schemas

Tech: React, Router, SWR/RTK Query, Tailwind/Shadcn, Express proxy, Jest/Playwright, GitHub Actions, Vercel.

#### Library Manager (C++ CLI)

repo: <https://github.com/gentleman654/Lib-Organiser>

- Implemented O(1) lookups using hash maps; processed **<N>** operations without data corruption.
- Added persistence (file I/O) and input validation; zero crashes across **<N>** fuzzed sessions.
- Wrote unit tests for borrow/return/fines; achieved **<XX>** coverage.

Tech: C++, STL, file I/O, unit tests (doctest/GoogleTest).

#### Mapping Delivery System —Test Harness & Edge Cases

repo: <https://github.com/gentleman654/RouteX>

- Designed test plan (boundary + property tests) for route mapping and delivery assignment.
- Generated **25** edge cases (disconnected nodes, identical weights, zero-distance loops) —prevented **8** defects.
- Built CI job to run tests on PR; blocked merges on failures.

Tech: C++/ C/ Vitest/ Unit Testing / Property-based testing, GitHub Actions.

### EDUCATION

Computer Programming (Diploma) —Seneca College, Toronto, ON

Relevant: Data Structures, Algorithms, Operating Systems, Databases, Networking Fundamentals, Software Testing.

### LINKS

GitHub: <https://github.com/gentleman654>

Portfolio: <https://personalportfolio-ashen.vercel.app/>

LinkedIn: <https://ca.linkedin.com/in/manas-gandotra-627a69244>