

Matheswaran S

☎ 8056324340 ✉ matheswaran322007@gmail.com 📧 matheswaran2410808@ssn.edu.in 🔗 linkedin
🐙 github 📁 portfolio

EDUCATION

Sri Sivasubramania Nadar College of Engineering ⓘ 08/2024 – Present
Bachelor of Engineering in Computer Science and Engineering
CGPA: 8.069/10
Chennai, India

Town Higher Secondary School ⓘ 06/2017 – 03/2024
Class XII: 96% (576/600) • School First
Class X : 93.6% (468/500)
Kumbakonam, India

SKILLS

Programming Languages — C++, Python, Java, C, SQL
Core CS — Data Structures & Algorithms, OOP, DBMS, Operating Systems, Computer Networks
Databases & Querying — MySQL, MongoDB
Tools / Technologies — Git, GitHub, HTML, CSS, TypeScript, React, Spring Boot, Postman

COMPETITIVE PROGRAMMING

LeetCode ⓘ : Solved 500+ problems, Max Rating 1754 (Top 10.42%).
Codeforces ⓘ : Max Rating 1117, Solved 290+ problems.
CodeChef ⓘ : 2★ Coder, Solved 70+ problems.

PROJECTS

RapidSearch – High-Performance In-Memory Search Engine ⓘ 07/2026
C++, STL, Trie, Inverted Index, TF-IDF, Multithreading, LRU Cache
• Built a modular in-memory search engine supporting exact, prefix, wildcard, phrase, Boolean, and fuzzy search over indexed document collections.
• Implemented Trie-based autocomplete, inverted indexing, TF-IDF inspired ranking, and Levenshtein-distance fuzzy matching for efficient information retrieval.
• Implemented O(1) LRU caching for repeated queries and parallelized index construction using std::thread.
• Designed persistent index serialization, comprehensive documentation, architecture diagrams, benchmarking, and unit test scaffolding using Modern C++17.

Course Management System ⓘ 08/2025 – 10/2025
Java, OOP, File Handling, Exception Handling
• Developed a terminal-based Course Management System with separate Admin and Student modules.
• Implemented authentication, course enrollment, quiz management, report generation, and persistent file-based storage using object-oriented design principles.
• Applied modular class design and exception handling to organize application workflows and handle runtime errors.

CERTIFICATES

Prompt Engineering for ChatGPT ⓘ
Vanderbilt University (Coursera)