

I am an enthusiastic computer science student interested in performance optimization and problem-solving using data structures and algorithms.

Education

Third Year Computer Science student	Cairo University	Sep 2019 – June 2023
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Cumulative GPA: 3.44/4.00.

Programming Languages and Technologies

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- Java, C++, Assembly, Python, JavaScript
 - MySQL, SQLite, SQL server, Git, GitHub, Bitbucket
 - HTML, CSS, Spring boot, postman, Django

Selected Projects (for full list see [GitHub](#))

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- **Car Service:** a web API helps users communicate with car drivers to transport users to any area using java, sprint boot, postman, sqlite3.
 - **Router Simulator:** a multithreading application that simulates connection between a router and several devices concurrently using java.
 - **An Image Compressor Algorithm:** an images compression algorithm is developed to reduce images' size to less than its original size through building a vector quantizer from scratch using java.
 - **CPU Scheduler Library:** a library contains 4 different CPU scheduling algorithms such as SJF, SJRF, FCFS and AGAT to distribute CPU power to processes using java.
 - **CLI:** a command-line interpreter that supports commands like pwd, ls, rm, mkdir, cp, cd, cat and more using java.
 - **Big Integer Library:** a library that performs arithmetic operations efficiently on long operands that can reach 10^8 digits using C++.
 - **Linear Algebra Library:** a library that supports linear algebra functions such as matrix inversion and matrix multiplication using python.

Self-Study

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- I have taken several courses over the past 3 years on competitive programming, data structures, algorithms, databases, networking, operating systems, design patterns, software engineering and web development.

Awards

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- **13th – place:** out of 100 teams at EPCP Qualifications in **2021**, for more info visit [ICPCID](#)
 - **18th – place:** out of 100 teams at EPCP Qualifications in **2020**, for more info visit [ICPCID](#)

Volunteer Work

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- **Java Instructor:** I am an instructor and coach for SCCI, a student activity branch at Cairo University.