

# Mahmoud Ahmed

Imbaba, Giza, Egypt - 12651

+201024970738 | mahmoud\_ahmed@stud.fci-cu.edu.eg | mahmoud-ahmed.me | mahmoudahmedd | mahmoudaahmedd

## Education

Faculty of Computers and Artificial Intelligence, Cairo University

Giza, Egypt

Sep 2016 - Jun 2021

- Relevant Coursework:** Fundamentals of Computer Sciences, Programming-1, Programming-2, Mathematics-1, Mathematics-2, Mathematics-3, Discrete Mathematics, Probability and Statistics-1, Probability and Statistics-2, Logic Design, Data Structure, Computer Networks-1, File Organization and Processing, Database Systems-1, Software Engineering-1, Operating Systems-1, Multimedia, Internet Technology.

## Skills

### Programming Languages

C++, Java, PHP, JavaScript, Python (Familiar).

### Object Oriented Programming

Very Good knowledge of many OOP concepts and design patterns.

### Data Structures and Algorithms

Strong knowledge of many data structures and algorithms.

### Problem Solving

Solved +200 programming problems on different online judges.

### Technologies

Web development(HTML, CSS, JSON, REST API, Ajax), MySQL, Git, Familiar with (Node.js, MongoDB).

## Experience

### Upwork

Egypt

#### Backend developer

July 2017 - PRESENT

- Create and developed the business logic and API services of 5 projects in PHP & 3 in C++
- Built a full-stack web app and launched to 200 users in PHP.
- Developed a tool to encrypt and decrypt text using C++.

## Selected Projects

### Website Builder

July 2019

[PHP MVC, MySQL, JavaScript, Google Maps API, PayPal Integration, HTML5, CSS3]

Team of 5

- A web platform. It allows stores or restaurants to create HTML5 websites through the use of dashboard tools and It allows customers to find the nearest store.

### HTTP Server

Apr 2019

[Java, OOP, Socket Programming, Multithreading]

Team of 5

- HTTP server that responds to a browser's requests such as GET, POST, PUT, and DELETE.

### Apps vs. Zombies Game

Jan 2020

[C++, SFML, OOP]

Individual

- A 2D game in which social media site has to survive waves of Zombies, Used a Trigonometric functions to rotate the player and set rotation of objects.

### Vector Quantization Image Compression

Dec 2019

[Java, OOP, File handling, Image Compression]

Team of 3

- A Java program that implements Vector Quantization LBG Algorithm on grayscale RAW images.

### Movie Recommendation System

Feb 2020

[Python, Numpy, Pandas, Scipy]

Individual

- A Item based Collaborative Filtering machine learning recommending system build with cosine similarities.

## Activities

### Software Engineering Students Support

1 of 4 students to mentor +300 students of the previous generation of my computer science college with supervisor Dr El Ramly to improve their skill of software engineering.

### Vodafone 010 Innovation Hackathon

Participant in Vodafone 010 Innovation Hackathon which is a Chrome extension that gives you points by watching ads to be replaced by money.

### Mshlwahdk.com

Volunteer at psychological support initiative to help +350k persons online.

### ACM-CU community

Attended a 3 months Competitive-Programming-based training held by ACM-CU community.

### Online Courses

C++ programming, C++ Game Programming, AWS concepts