# **Omar Ahmed Hafez**

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### **Summary**

Competitive programming problem solver (solved +1000 problems on different online judges) with high interest in discrete mathematics and passion to develop apps in general.

#### **Education**

**BSc.** Of Electronics and communications engineering,

Sep. 2018 – Aug. 2023

Mansoura college academy, Mansoura, Egypt

• GPA: 3.91 (Ranked 1st).

#### **Achievements**

Ranked 1<sup>st</sup> out of Undergraduate class.

Sep. 2018 - present

Solved 1000+ problems on different online judges.
(Like codeforces, atcoder, hackerrank, UVA, projecteuler).

2020 - present

■ 24<sup>th</sup> Place within Egypt at projecteuler.net by solving 100+ problems on it.

2019 - present

2<sup>nd</sup> Place at Code Against Time from Mansoura Robotics.

Feb. 2021

Solved most of the math problems in discreate mathematics Rosen's book.

(Mar. – Jul.) 2020

#### **Skills**

Programming Languages: Java, C++, C#, Assembly, Python

 Concepts: Problem Solving, Data Structure, Algorithms, OOP, Linux, Discrete Mathematics, Git, Microprocessors and Assembly.

• Languages: Arabic (Native), English (Very good).

## **Personal Projects**

Competitive Programming Tool: Desktop app (Linux and Windows) That Compile and run the solution of competitive programmers and test it against some test cases. It also submits the solution automatically form the app itself and load the result of submission in the app. (Used by 600+ user around the world till now).

**Using**: Java, Java swing and Java selenium web driver.

Student Guide: Desktop app that shows some data for the students and calculate the GPA. And help the students to choose the classes and save the chosen classes in an excel file automatically. I build this project when I was in my first year and I won the first place on my class.

Using: C#

### Courses, Book, Certifications

- CS50 from Harvard university.
- Data Structures and Algorithms Specialization. (by university of California San Diego and HSE university).
- Object Oriented Programming in Java Specialization (by Duke University and University of California San Diego).
- Head First Object-Oriented Design & Analysis.
- Discrete mathematics and its applications by Kenneth .h Rosen. (I solved most of the math problems in it)
- Code by Charles Petzold.
- Effective Java. (present)