

ALI MOHAMED HUSSIEN KOTB

Phone: (+20) 1097444712 ◊ Email: ali.2523056@stemelsadat.moe.edu.eg

Portfolio: alimohamed.me

[Github](#) ◊ [LinkedIn](#)

EDUCATION

El-Sadat STEM Schools

July 2026 (expected)

STEM Honors Diploma, GPA: 3.9/4.0 (Grade 10)

EFSET (EF Standard English Test) = 67 (C1)

Duolingo English Test = 125

RESEARCH INTERESTS

I am interested in Computer Science, especially Cybersecurity and Chemistry.

PROJECTS

Caesar cipher:

The Caesar cipher is a simple encryption technique where each letter in a message is shifted by a fixed number of positions in the alphabet.

integrity Checker :

An integrity checker calculates a file's hash value and compares it to a known, correct hash to verify that the file has not been altered or corrupted. This is important for checking if there is any sensitive or important data have been edited by someone who is unauthorized to edit it.

Password Manager :

A password manager is a secure tool that stores, organizes, and manages all your passwords in an encrypted vault. It allows you to access and use your passwords easily with just a single master password, ensuring strong security across all your accounts.

Cybersecurity Analysis :

As part of my cybersecurity analysis, I conducted a comprehensive malware scan, checked for any backdoors that could allow unauthorized access, utilized OPENVAS to identify vulnerabilities, and identified attacking open ports to prevent potential breaches. These efforts were essential in ensuring the security and integrity of the systems I was working on.

Capstone project G10 Second Semester(Knocking For Power) :

This project was a creative Idea for Me and My Team which aimed to Generate electric energy From Kinetic Energy (From opening and closing the door) which was the best Project in our school.

password Strength Evaluator :

A password strength evaluator analyzes a password's complexity and security by assessing factors like length, character variety, and patterns to determine its resistance to attacks.

ACTIVITIES

Founder of Sadat STEMpire

July 2024 - Present

- Sadat Sadat STEMpire is a non-profit group that helps STEM seekers achieve their dreams by joining STEM schools and Passing STEM Admission Tests.
- This group Provides Four sessions every week for subjects like English, IQ, Math, and Science and interacts with the students to answer all of their questions.
- Two Exams related to the Topics discussed every week + recording sessions for Solving these exams to explain any misunderstanding. (Reaching finally to 60 Exams in the first year)
- Immersing in a collection of over 10 study files In physics, chemistry, and Biology To Make The hard concepts in these topics be more easier.
- Telegram Bot To answer all the students' questions related to any topic with full explanation
- all of these Materials have been gathered and collected in one place to be easier to reach for all students in one link on [Linktree](#)

Experimental Digital Virtual Exchange students

June 2024

- It was a six-week virtual program is done by Attending sessions with people from other countries and discussing topics about admission and How to choose your Major.

Member @ STEM astronomy Club

Feb 2024

- STEM Astronomy Club is a club that Aims to learn a lot of things Mainly astronomy and also programming and Using Latex.

ACHIEVEMENTS AND COURSES

Second Place in DECI (Digital Egypt Cubs Initiative) over more than 8000 Students	<i>Feb 2024</i>
DECI level 3 Cybersecurity	<i>Oct 2023</i>
Writing in the Sciences (From Stanford)	<i>Aug 2024</i>
Play It Safe Manage Security Risks	<i>Mar 2024</i>
Cybersecurity Fundamentals (From IBM)	<i>Aug 2024</i>
Explore Emerging Tech (From IBM)	<i>Aug 2024</i>
The Experiment Digital at World Learning	<i>Aug 2024</i>
Foundations of Cybersecurity	<i>Feb 2024</i>
TOFAS (Math Test) level 2	<i>Oct 2021</i>
TOFAS (Math Test) Level 5	<i>Nov 2023</i>
TOFAS (Math Test) Level 6 (The hardest level)	<i>Mar 2024</i>

SKILLS/HOBBIES

Programming Languages

Python, CSS, HTML , \LaTeX

Computer Usage

Windows, Linux, Ubuntu, Parrot OS

Hobbies

Table tennis and Volleyball