# **Ahmed Gamal Eltokhy**

**Q** Cairo, Egypt ■ eltokhy@aucegypt.edu
 +201552659678
 **Q** TokieSan
 **%** tokiesan.github.io

### **EDUCATION**

## The American University in Cairo

Jul. 2020 - Dec. 2024

Double Major: B.S. in Computer Engineering and Mathematics, GPA: 4.0

Relevant Courses: Linear Algebra, Discrete Mathematics, Probability and Statistics, Analysis and Design of Algorithms, Digital Design, Assembly Language, Graph Theory, Modern Algebra

#### **SKILLS**

**Languages & Frameworks Software & Tools** 

C, C++, Python, HTML, CSS, LaTeX, Bash, JavaScript, SQL, Scala Linux, Git, SSH, bootstrap, QT, Matplotlib, Pandas, Numpy, SMTP, Cron, Mechanize, JSON, Fortinet, MikroTik, Sophos, SystemD, Manim

#### **WORK EXPERIENCE**

## The American University in Cairo

Peer Tutor

New Cairo, Egypt Aug. 2021 - May. 2022

• With the coordination of the School of Sciences and Engineering in the AUC, held more than 150 one-on-one tutoring sessions teaching Calculus I, II, III, Discrete Mathematics, Analysis and Design of Algorithms, and Fundamentals of Computing I, II

## STEM High School for Boys - 6th of October

Giza, Egypt

IT Coordinator

Jun. 2017 - Oct. 2019

- Maintained network infrastructure using Fortinet, MikroTik and directed the migration for Sophos in 17 days
- Provided live technical support for 450 students and 80 faculty members for Windows and Linux personal devices
- Mentored scheduled backups for the used systems with automated testing using Cron and SystemD

# **PROJECTS**

Digital Clock May. 2022

Fabricated a functional digital clock using Verilog with customized constraints to be run on FPGA Boards

## T&J Game: Algorithmic Maze Simulation

May. 2021

• Constructed a maze simulation using **Graph** data structure, **Dijkstra Algorithm** for finding shortest path in an optimal complexity, **Wilson's Algorithm** for maze generation and **QT** for composing the GUI.

Tokhy's Hub Jan. 2021

• Created a personal blog with a customized **bash** backend and staticly hosted pages by HTML and CSS with the goal of minimizing size **(1.19KB)** and maximizing performance for a fully functional blog

The Polar Storm Jun. 2018

• For NASA Space Apps, analyzed a **86 GB** dataset that tracks spatial and temporal changes in Antarctica using **Pandas**, **Numpy**, **Matplotlib**, **Manim**, and created a visualizing website developed using **HTML**, **CSS**, **JavaScript**, **Bootstrap** with UI designed by **Adobe XD** in a **48-hour** competition

#### **EXTRA-CURRICULAR**

# Open Source Community - The American University in Cairo, Founder

Aug. 2021 - Present

- Founded and launched the community with the mission of advocating the **FOSS philosophy**, popularizing open source software and contributions workflow, and keeping up with latest OSS updates.
- Raised 36K EGP in funds within the first semester of launch

### **ACTIVITIES AND ACHIEVEMENTS**

Silver Medal in Egyptian Collegiate Programming Contest, 2022

First place in AUC ACM-ICPC competition, 2022

Second place in AUC ACM-ICPC competition, 2021

PSSF Scholar, attained a full scholarship to pursue the bachelor's degree in AUC, 2020