# Abd El-Twab M. Fakhry



## EDUCATION

# Faculty of Engineering, Al-Azhar University

Cairo, Egypt

Bachelor of Science (BSc) in Computers and Systems Engineering.

Sep. 2017 - Aug. 2022

#### Extra-curricular Activities

• Finalist at Africa & Arab Collegiate Programming Championship (2020).



- 2x Finalist at Egyption Collegiate Programming Contest (2019, 2020).
- 3rd & 2nd palce at Al-Azhar Collegiate Programming Contest (2019, 2020).
- Taught algorithmic topics, data structures, and problem-solving paradigms to over 50 participants.



- Offered training at various levels and composed problems for weekly practice sheets and competitions.
- Successfully tackled over 1000 algorithmic challenges on various online judging platforms.

#### EXPERIENCE

**A**tomica AI

Cairo, Egypt

Nov. 2022 - Present Software Engineer II

- Developing various internal tools with varying degrees of complexity that cater to the specific needs of each team, improving their workflow, boosting their capabilities, and simplifying their tasks.
- Utilizing C/C++, Qt/QML, CMake, and Git to construct and manage the tools.

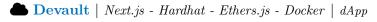
### Selected Projects

▲ Loc | Flutter | Android

Jan. 2023 - Present

Free and open-source location-based reminder for Android.

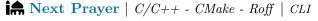
o Developing "Loc," an Android application that provides over 10 features, including setting multiple reminders, saving favorite places, showing distance, providing customizable reminders, and supporting offline and online navigation with live location tracking and sound reminders.



Apr. 2022 - Present

A Blockchain-based, decentralized, and end-to-end encrypted cloud storage.

- o Designed a decentralized application (dApp) using Next.js and Solidity. The dApp is integrated with multiple cryptocurrency wallets, such as Metamask, to provide users with the ability to login to "Devault".
- Using a smart contract as a public database and utilizing the InterPlanetary File System (IPFS) network and client-side encryption/decryption techniques to securely store and retrieve files.



Sep. 2021 - Present

Islamic prayer notifier for Unix status bars.

o Creating "next-prayer," a software that utilizes web APIs to obtain one year of prayer timings, caches them locally for offline access, sends adhan notifications, displays the next prayer and its time in the status bar, and allows users to configure their preferences through a configuration file.

 $\square$  Anthology of Algorithms and Data structures |C++| library

Aug. 2020 - Present

Common code for competitive programming in C++.

• Writing a comprehensive C++ library for competitive programming that covers more than 8 topics, including graph theory, mathematics, problem-solving paradigms, and data structures.

#### Technical Skills

- **\'\> Languages**: C/C++ Java Go JavaScript Solidity Python Bash Lua SQL FTFX HTML/CSS
- Technologies: React.js Node.js Flutter Qt/QML Blockchain
- X Tools: Linux Git Make/CMake Docker Emacs CI/CD Figma