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Summary

- I am A self-motivated hard-working software engineer who emphasis on deep conceptual understanding optimization, and loves algorithms and software performance optimization.

- I am graduated from **Faculty of Computer & Artificial Intelligence**

- I have powerful **problem-solving skills**. I used different programming language and technologies.

- **Back-End Developer / Full Stack Developer**.

Skills

- Learn new technologies and programming languages quickly and efficiently
- **Problem Solving Skills**: I Have a strong background in a lot of topics like Data Structure & Algorithms & Graph Theory & Math & Dynamic Programming.
  - **Leetcode (top 50 Egyptians)** Profile Link Rank (zdac1010)
  - **Codeforces (top 200 Egyptians)** Profile Link
  - HackerRank (top 2000 in math track , **gold level**) Profile Link
  - SPOJ (top 10 thousand world rank) Profile Link
- **Web Development**
  - Front End :: (HTML – CSS – JavaScript - jQuery – Bootstrap).
  - **Back End** :: (PHP – OOP- MVC – AJAX – MYSQL (pdo) - WordPress Development)
- Programming Languages used before: **C++(3Y) & Python(1Y) & Java (3Y)**.
- Basics: Design pattern – parallel programming – network programming……
- Git & GitHub
- Arabic, English.

Projects

Intelligent System for Student Guide

- a web application solving some problems in the faculty between students and professors and saving time and effort to each of them.
- Features**: Live streaming API, attending with GPS, quizzes and assignments system and, Courses registration, organized material, and courses.**
- Programming: **PHP, OOP, jQuery, JavaScript, AJAX , HTML , CSS , bootstrap ,APIs**.
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TriCov

a web application used for trim & convert & download YouTube video or user can upload his video and can download a lot of websites video like Facebook, Instagram , Vimo , Dailymotion (all list).
- **Youtube-dl**: catch & download the video.
- **ffmpeg**: convert and trim formats.
- Programming: PHP, OOP, JavaScript, AJAX, HTML, CSS.

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Solve Your Maze ([YouTube Link](#))

- It is Game developed by JavaScript have a lot of dynamic options making it easy to create any maze you want and start game try to solve it.
- Generating Algorithms: **Depth First Search, Randomized Kruskal, Randomized Prim, Backtracking**
- Solving Algorithms: **Breadth First Search, Dijkstra's Algorithm, A* search Algorithm**
- **Travelling salesman problem**: you can collect all carrots in any maze it is a popular **NP-Hard** Problem so I used solution of it if carrots < 9 (carrots + start + end = 10) and the algorithm run perfectly (the process as following) and you can put carrots as you want.
>   - **Floyd Algorithm** to get the shortest paths between carrots
>   - **Generate Graph** to work on it
>   - **Bit manipulation** + (BFS or dynamic programming with some pruning get solution faster).
>   - if (nodes > 10) we will use **minimum spanning tree** instead of last operation.

Work Experience & Education

Full Stack developer   **8/2020 – 10/2020**
 - OctopusPro Pty Ltd

- It is an Australian company based in Sydney and I work in the Egypt team
- Working in a lot of tasks related with databases & updating the system & adding new features.

Compulsory Military Service   **9/2019 – 7/2020**

- I was in the infantry soldiers in the second field army in Ismailia.

Algorithms Training   **9/2018 – 7/2019**
 - ACM BSU

- I was **help newcomers to mentor them and explain some algorithms to them** to increase their skills and mine
- We were study algorithms as teams.
- I was hard self-study to improve my problem-solving skills in online judges and courses.

Summer Training   **7/2018 – 9/2018**
 - FCI Bani Suaf

- We were training in web development as a team with some assistant teaching and finish some tasks to increase our skills and have the ability to finish the graduation project in the perfect way.
- I was training as a back-end developer with PHP-AJAX-MYSQL-OOP-JS.

Education

Faculty of Computer & Artificial Intelligence   **6/2015 – 7/2019**
 - Bani Suaf University

- As expected in any faculty, I had finished a lot of courses in the faculty and finished a lot of small projects for every course with different programming languages, tools and frameworks. often, I have excellent in the projects and tasks and that gives me a very large experience and knowledge.
- And I finished a lot of courses in Udemy, Udacity, Coursera in parallel with courses in faculty.