# **Omar Nasr**

### Software Engineer







github.com/BlueLort linkedin.com/in/Lort/ bluelort.github.io/Profile/



emaranasr@gmail.com

## About me –

Software Engineer that is passionate about science and technology especially Computer Graphics, Game Development & Robotics.

# Skills ——

C++

C

Java

OpenGL

**Unreal Engine** 

Unity

Web Development

[Skill rate is determined on how i am comfortable with certain technology.]

### Education

2016-2021 Faculty of Engineering

Alexandria University

Computer & Communications Department. GPA 3.16

#### Awards

2018 5th Place in UGVC2018 with MindCloud.

2018 4th Place in Minesweeper2018 with MindCloud.

#### **Experience**

2017-2019 Software Engineer at MindCloud

University Robotics Team.

**Technical Team** 

**Projects** 

Ongoing Game-X Engine C++ SDL OpenGL ImGUI

GameX Engine is a 2D/3D Game Engine being built on top of improved

features of GameX Level Editor.[Work In Progress]

Sep-2019 Type Racer Game Web Development [PHP Bootstrap]

The famous Type-racer game with words/min statistics and leader-

Jul-2019 Minesweeper Grid Visualization

Web Development [NodeJS ThreeJS]

NodeJS application to Visualize how the mines are put into the grid in Minesweeper robotics competition in Real-Time.

SIC/XE Assembler May-2019

Java JavaFX

Two Pass Assembler that translate SIC/XE to obj code.

-You can load your code file or you can write it directly into the Editor then the user can check the output from the 'Assemble' menu like the

ListFile and the ObjFile.

Mar-2019 Lort Renderer

C++ SDL

Optimized Software Renderer that written in an way to get high FPS.

-Fixed Point arithmetic.

-Perspective correct texture mapping.

-Lighting and Shadows

-OBJ Models Support.

-SIMD Maths.

Oct-2018 GameX Level Editor

Shadows.

C++ OpenGL SDL CEGUI

User-Friendly Level Editor that helps to create 3D Environments.

-Stable For OBJ models [Supports other formats]

-config. file that enables flexibility for the user.

-General GLSL inputs that can be used for any user made GLSL files.

-Navigation mesh That helps to find walk-able areas of the map.

-Relatively good graphics with Directional & Point Light Support along with Normal mapping in Tangent Space, Reflective water surface and

May-2018 Maze Runner

Java JavaFX

Game that challenges the player to finish a maze.

-Flipbook animations on JavaFX Canvas.

-Different Design Patterns were used.

-Particle effects, Camera and other challenging game objects.

Apr-2018 Text Autocorrect

Uploads custom dictionary to an auto-balancing tree that is used to suggest correct words.

-Two versions AVL Tree[C],RB Tree [Java JavaFX]

Mar-2018 Paint

-Drag & Drop Shapes. -Different Design Patterns were used.

Feb-2018 Asteroids 1979

C++ OpenGL

Java JavaFX

Clone of 1979 Asteroids retro game.