

# LEEN KHAROUF

## COMPUTER ENGINEERING INTERACTIVE MEDIA

### CONTACT

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### SKILLS

C++, Python, C#, C, HTML/CSS

Unity Game Engine, Adobe Photoshop,  
Figma, Procreate, UX Design,

### EDUCATION

#### New York University Abu Dhabi

Bachelor of Science in Computer  
Engineering  
GPA: 3.80 | Graduation: June 2025

#### Brighton College Abu Dhabi

**A-Levels:**  
Maths (A\*), Chemistry (A\*), Physics (A\*)  
Graduation: June 2020

### LANGUAGES

English   
Arabic   
Spanish

### PROJECTS

#### Interactive 3D Self-Avoiding Walk Simulation (Unity, C#)

Developed a 3D maze simulation featuring explosions that alter paths, multiple non-colliding agents, dynamic camera controls for optimal viewing, and a user-initiated reset functionality.

#### ColorScape: A Chromatic Game of Life (Unity, C#)

Engineered a variant of the Game of Life where the canvas is segmented into colored zones influencing cell behavior, enhancing visual feedback and analytical depth of the simulation.

#### Vertically Integrated Projects: NYU Processor Design Team

Worked with a team focusing on microprocessor design, learning to write and test code using Verilog, System Verilog, and employed Git for version control.

#### Cache Simulator (C++)

Implemented a dual-cache system using a write-through, write-allocate policy and LRU replacement for associative caches to manage data efficiently and monitor cache interactions.

#### Embedded Messenger (Arduino, C++)

Currently developing a handheld messenger device using embedded systems principles, featuring message creation through hand movements and display via LEDs.

#### Parallax: An Interactive Illustration

July 2023

Created an interactive artwork using Procreate and JavaScript, achieving a dynamic 3D effect with parallax motion, showcasing a fusion of technical skills and artistic creativity.

#### Google UX Design Professional Certificate

In progress

Pursuing a certificate to deepen knowledge in user-centered design, UX research, and foundational design principles. Developing a portfolio of mobile apps and responsive websites.

#### Fall Detection Device

October 2021 - December 2021

Engineered a device using Arduino to detect falls and notify emergency contacts through automated alerts, equipped with a user-friendly interface for health evaluation.

### PROFESSIONAL EXPERIENCE

#### Freelance Graphic Designer & Artist

Founder & Operator

Developed and managed a personal brand for art commissions, interacting directly with clients to tailor designs to their specifications, and created marketing materials to promote services on various platforms.

#### The PE Classroom

Graphic Designer and Content Producer

Managed database administration and website graphic design, created logos and icons suitable for specific layouts and applications.