

Ebrahim Karam

Software Control Engineer

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ebrahim.karam@gmail.com
+1 215 459 2152 ebrahimkaram.com

WORK EXPERIENCE	1220 Exhibits	Nashville, TN, USA
	Interactive Technician	Oct 2024 – Present
	Third Coast Automation	Nashville, TN, USA
	Software Control Engineer	Jul 2024 – Oct 2024
	Helped build a Fuel system for the American Embassy in south Sudan using a WAGO PLC in structured text and Ladder Logic	
	Designed an HMI system using the HMI tools from CodeSys	
	Wrote a verification document for the system that was built	
	Animax Designs, Neon Global	Nashville, TN, USA
	Software Engineer	Jul 2022 – Jul 2024
	Helped with installations of animatronics and interactives all over the world	
	Created HMIs/GUIs in C# and Perspective Ignition to control and Maintain attractions and animatronics	
	Created Scripts and subroutines to improve workflow and documented procedures.	
	Developed code in Structured Text on Beckhoff PLCs to control figures and integrate them with Show Control Systems	
	National High School Game Academy, Carnegie Mellon University	Pittsburgh, PA, USA
	Unity Developer & Advanced Programming Topics Teaching Assistant	Jun 2021 – Aug 2021
	Helped create a curriculum to be taught to students	
	Gave students tech Support in Unity, C#, and Perforce	
	Delivered feedback on their work and personal game designs	
	AUB Aerosol Lab, American University of Beirut	Beirut, Lebanon
	Research Engineer	Oct 2017 – Dec 2020
	Developed and built instruments that measure users' puffing behavior	
	Built and developed an "Exposure Apparatus" to expose mice to water pipe smoke using C and Arduino	
	Created a data retrieval program for our air pollution monitor using Python and did some preliminary data analysis using pandas and Numpy	
EDUCATION	Carnegie Mellon University, Entertainment Technology Center (ETC)	Pittsburgh, PA
	Master of Entertainment Technology	May 2022
	American University of Beirut (AUB)	Beirut, Lebanon
	BE in Electrical and Computer Engineering	Sep 2013 – Sep 2017
	Minor In Mathematics and Biomedical Engineering	
SKILLS	Programs & Tools: MATLAB, MATHEMATICA, SOURCE TREE, GIT, Microsoft Office, Unity, Reaper, VMWare, Beckhoff TwinCAT, Codesys	
	Programming Languages: C++, C#, PYTHON, HTML5, CSS3, L ^A T _E X, STRUCTURED TEXT, POWERSHELL, C	
	Languages: English: Native Language, Arabic: Fluent (speaking, reading, writing), French: Intermediate (reading), basic (speaking, writing)	
ACADEMIC PROJECTS <i>Click-able</i>	Team EyeDeal	Fall 2021
	Provided analytics to the researchers from the game in C# with Unity	
	Worked on gamer feedback such as camera shake, audible meteor detection, and others	
	Team Help A peer	Spring 2021
	Created an Augmentation of Zoom via WPF and C# to give more tools for the teacher in the classroom.	
AWARDS & SCHOLARSHIPS	Gold Medal Winner From Serious Play Conference For Project Eyeddeal	June 2022
	Best overall in makeathon Rethink the Rink (Purple Team)	Mar 2022
	Recipient of the Electronics Art Diversity and Inclusion Award	Academic Year 2021-2022