Ghassan Younes

ghassan@ghassanyounes.com | www.ghassanyounes.tech | +1 (425) 529-6730 | /in/ghassanyounes

Skills

C/C++							
Zsh Bash LTFX DHCP DNS Board Bringup DHCP DNS Board Bringup DHCP DNS DHCP DNS DP DP DP DP DP DP DP D	Languages & APIs		Protocols		Equipment		Knowledge Base
Rust Swift Perl DHCP DNS Board Bringup Algorithm Git & SVN Source FC SPI CAN Logic Analyzers Circuit Testing Equipment Git & SVN Source Garden FC SPI CAN CAN Canalyzers Circuit Testing Equipment Git & SVN Source Garden	C++ C#	Java	LTS	Spice	Oscillo	oscopes	FPGA
Rust Swift Perl DHCP DNS Board Bringup Algorithm Matlab Python HTTP(S) (S)FTP 3D Printing Logic Analyzers Circuit Testing Equipment Git & SVN Source Bare-Metal Programment Proposed Propo	sh Bash	IAT _E X	USB / U	JSB-HID	PCB	Mills	Control Systems
Matlab	ust Swift	i	DHCP	DNS	Board 1	Bringup	Digital Signal Processing
HTML CSS UART ZigBee Circuit Testing Equipment Bare-Metal Programs PHP Query Vulkan OpenGL Operating Systems CAD and Modeling Software Microcontroller Figure System Volkan OpenGL Amd64/Arm Assembly Linux BSD Software Software Task Delegat Embedded C/C++ Real-Time Operating Systems Fusion360 OpenSCAD Problem-solv Professional Experience Professional Experience Eaching Assistant, CS 100 - DigiPen Institute of Technology Microcontroller to send to incoming students Programmed and tested lab kits involving the TIVA-C 123 microcontroller to send to incoming students Programmed and tested assignments/exams in ARM Assembly to interface with the TM4C123 launchpad device board from Texas Instruments Constructed and tested simple circuits involving switches and relays Collaborated with professors to assemble kits on time Computer Engineering Lab Assistant DigiPen Institute of Technology August 2020 Maintained cleanliness and organization of the labs to ensure optimal ergonomic access and accessibility Familiarized myself with part-ordering process to ensure constant stock of consumable parts Tutor in Math, Physics, Computer Science, and Engineering - DigiPen Institute of Technology August 2020 Assisted students in understanding core concepts from courses I had previously taken Encouraged students to ask for help and approach problems in new ways Academic Projects DART: Dubatron Autonomous Remote Tank - Lead Engineer January 2022 Goal: Modify the previous year's custom controller with a 'tank' (a small tread-based vehicle) to control it wirelessly gyroscope. The tank will override user control to avoid collisions by using infrared and ultrasonic sensors. Custom Video Game Controller - Lead Engineer January 2020 Goal: Create a new and unique experience for playing a 2D-platformer game, and then expand capabilities to work as controller, involves design and population of a PCB and chassis CAD model High-Altitude Solar Array -		•	HTTP(S)	(S)FTP		O	Algorithms
JavaScript Node.js PHP JQuery Vulkan OpenGL amd64/Arm Assembly Systems Linux BSD Software Embedded C/C++ Real-Time Operating Systems Embedded C/C++ Real-Time Operating Systems Embedded C/C++ Real-Time Operating Systems Fusion360 OpenSCAD Problem-solv Professional Experience Teaching Assistant, CS 100 - DigiPen Institute of Technology June 2020 Assembled and tested lab kits involving the TIVA-C 123 microcontroller to send to incoming students Programmed and tested assignments/exams in ARM Assembly to interface with the TM4C123 launchpad dev board from Texas Instruments Constructed and tested simple circuits involving switches and relays Collaborated with professors to assemble kits on time Computer Engineering Lab Assistant - DigiPen Institute of Technology August 2020 Maintained cleanliness and organization of the Engineering labs Restructured and optimized organization of the Engineering - DigiPen Institute of Technology August 2020 Maintained Students in understanding core concepts from courses I had previously taken Encouraged students to ask for help and approach problems in new ways Academic Projects DART: Dubatron Autonomous Remote Tank - Lead Engineer Students in example and ultrasonic sensors. Custom Video Game Controller - Lead Engineer August 2020 Goal: Create a new and unique experience for playing a 2D-platformer game, and then expand capabilities to work as controller, involves design and population of a PCB and chassis CAD model High-Altitude Solar Array - Hardware Engineer . January 2020-Goal: Design and build a device with size and weight constraints for use in a high-altitude (35km) balloon using Microntroller to read in values from a custom voltmeter and ammeter using ADC, and a cricketsat 555 circuit paire antenna to transmit data to the ground station	;	•	UART	ZigBee	_	•	Git & SVN Source Control
PHP JQuery Vulkan OpenGL amd64/Arm Assembly SystemVerilog Embedded C/C++ Real-Time Operating Systems Fusion360 OpenSCAD Fask Delegat Taak Delegat Taak Delegat Taak Delegat Professional Experience Teaching Assistant, CS 100 - DigiPen Institute of Technology June 2020 • Assembled and tested lab kits involving the TIVA-C 123 microcontroller to send to incoming students Programmed and tested assignments/exams in ARM Assembly to interface with the TM4C123 launchpad dev board from Texas Instruments • Constructed and tested simple circuits involving switches and relays • Collaborated with professors to assemble kits on time Computer Engineering Lab Assistant DigiPen Institute of Technology August 2020 • Maintained cleanliness and organization of the Engineering labs • Restructured and optimized organization of the labs to ensure optimal ergonomic access and accessibility • Familiarized myself with part-ordering process to ensure constant stock of consumable parts Tutor in Math, Physics, Computer Science, and Engineering DigiPen Institute of Technology August 2020 • Assisted students in understanding core concepts from courses I had previously taken • Encouraged students to ask for help and approach problems in new ways **Academic Projects** DART: Dubatron Autonomous Remote Tank - Lead Engineer January 2022 Goal: Modify the previous year's custom controller with a 'tank' (a small tread-based vehicle) to control it wirelessly gyroscope. The tank will override user control to avoid collisions by using infrared and ultrasonic sensors. **Custom Video Game Controller - Lead Engineer January 2020 Goal: Create a new and unique experience for playing a 2D-platformer game, and then expand capabilities to work as controller, involves design and population of a PCB and chassis CAD model High-Altitude Solar Array - Hardware Engineer January 2020 Goal: Design and build a device with size and weight constraints for use in a high-altitude	;		I ² C Si	PI CAN	Circuit Testir	ng Equipment	Bare-Metal Programming Microcontroller Firmware
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amd64/Arm Assembly SystemVerilog Embedded C/C++ Real-Time Operating Systems Fusion360 OpenSCAD Problem-solv Professional Experience Teaching Assistant, CS 100 - DigiPen Institute of Technology Assembled and tested lab kits involving the TIVA-C 123 microcontroller to send to incoming students Programmed and tested assignments/exams in ARM Assembly to interface with the TM4C123 launchpad dev board from Texas Instruments Constructed and tested simple circuits involving switches and relays Collaborated with professors to assemble kits on time Computer Engineering Lab Assistant - DigiPen Institute of Technology Maintained cleanliness and organization of the labs to ensure optimal ergonomic access and accessibility Familiarized myself with part-ordering process to ensure constant stock of consumable parts Tutor in Math, Physics, Computer Science, and Engineering - DigiPen Institute of Technology Assisted students in understanding core concepts from courses I had previously taken Encouraged students to ask for help and approach problems in new ways Academic Projects DART: Dubatron Autonomous Remote Tank - Lead Engineer Goal: Modify the previous year's custom controller with a 'tank' (a small tread-based vehicle) to control it wirelessly gyroscope. The tank will override user control to avoid collisions by using infrared and ultrasonic sensors. Custom Video Game Controller - Lead Engineer Goal: Modify the previous gear's custom controller with a 'tank' (a small tread-based vehicle) to control it wirelessly gyroscope. The tank will override user control to avoid collisions by using infrared and ultrasonic sensors. Custom Video Game Controller - Lead Engineer Goal: Create a new and unique experience for playing a 2D-platformer game, and then expand capabilities to work as controller, involves design and build a device with size and weight constraints for use in a high-altitude (35km) balloon using Microntroller to read in values from a custom voltmeter and ammeter using ADC, and a cricketsat 555 circuit paired an	i , ~ ,						Soft Skills
SystemVerilog Real-Time Operating Systems Fusion360 OpenSCAD Task Delegat Embedded C/C++ Real-Time Operating Systems Fusion360 OpenSCAD Problem-solv Professional Experience Teaching Assistant, CS 100 - DigiPen Institute of Technology	' '						Teamwork
Professional Experience Teaching Assistant, CS 100 - DigiPen Institute of Technology		•	Windows	macOS	EagleCAD	KiCAD	Task Delegation
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• Encouraged students to ask for help and approach problems in new ways Academic Projects DART: Dubatron Autonomous Remote Tank - Lead Engineer	or in Math, Pł	hysics, Compi	ıter Science, and	l Engineering - Γ	DigiPen Institute	of Technology	August 2020 - Present
Academic Projects DART: Dubatron Autonomous Remote Tank - Lead Engineer	Assisted stu	udents in und	erstanding core o	concepts from cou	ırses I had previ	ously taken	
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DART: Dubatron Autonomous Remote Tank - Lead Engineer	Academic	c Projects					
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Microntroller to read in values from a custom voltmeter and ammeter using ADC, and a cricketsat 555 circuit paired antenna to transmit data to the ground station	sh-Altitude So	olar Array - H	ardware Enginee	er			January 2020 - May 2020
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ri e	enna to transm	nit data to the	ground station				
Education	Education	n					

Bachelor of Science in Computer Engineering - DigiPen Institute of Technology Expected May 2023

ABET/EAC Accredited program.

Redmond WA, USA.