

AL KALBANI, WAIL (WA'EL)

wael@pdx.edu

+1(503) 720-0427

1818 SW 4th Ave APT 1226, Portland, OR 97201

OBJECTIVE

Utilizing my knowledge of computer engineering and political economy, I aim to contribute to the development of global technology policies and economic strategies. With a strong passion for leveraging technology to address societal challenges and promote digital inclusion and sustainable growth, I am eager to join a team of like-minded individuals in a progressive organization.

GOAL: To excel my professional skills to solve related industry problem and obtain the H-1B working visa.

EDUCATION

2021 - 2024 **PORTLAND STATE UNIVERSITY** **PORTLAND, OREGON**

Bachelor of science in Engineering. Major: Computer Engineering. Minor (1): Electrical Engineering. Minor (2): Political Economy. **GPA: 3.4**

2018 - 2020 **CURTIN UNIVERSITY** **PERTH, AUSTRALIA**

Associate Degree. Major: Electrical and Electronics Engineering.

EXPERIENCE

2021 - 2024 **PORTLAND STATE UNIVERSITY** **PORTLAND, OREGON**

Student Ambassadors Program Coordinator | Through this experience I developed diverse leadership and project management skills while serving in multiple roles as *POD Leader, Hiring Committee Lead, Liaison to Portland State University Foundation*

Engineering Prototype Laboratory Manager | As EPL manger I gained experience in managing an engineering lab and developed relevant technical skills dealing with electronic, lab kits, and 3D printing.

Nov - Dec 2023 **OMANI DELEGATION TO DOHA INTERNATIONAL FORUM** **DOHA, QATAR**

Member | Nominated by Ministry of Culture, Sports and Youth to represent Oman at the international forum to discuss global efforts to achieve UN sustainable goal No.17 with the participation of a number of youth associations around the world (Italy, Slovenia, Oman, Morocco, India, Pakistan).

Aug - Sep 2023 **OMAN YOUNG AMBASSADORS PROGRAM** **MUSCAT, OMAN**

Diplomat Trainee | Organized by the Ministry of Culture, Sports and Youth in cooperation with the Foreign Ministry and the United Nations Institute for Training and Research. To provide youth with necessary knowledge to participate in regional and international conferences, events and meetings.

May - Oct 2022 **EMBASSY OF THE SULTANATE OF OMAN** **WASHINGTON, D.C**

Website Developer Intern | Acquired practical skills in web development, including data gathering and sorting, which improved my troubleshooting abilities in utilizing various web development technologies.

Aug - Oct 2021 **NAMA ELECTRICITY DISTRIBUTION COMPANY** **MUSCAT, OMAN**

Control Engineering Trainee | Adapted practical experience in various aspects of control systems engineering, including maintenance, planning, SCADA control, data reporting, sustainability, and customer applications. This exposure enhanced my technical expertise and broadened my understanding of the field.

Jun - Aug 2021 **DALEEL PETROLEUM**

MUSCAT, OMAN

Instrumentation Engineering Trainee | Hands-on experience in instrumentation engineering, particularly in data control and transmission, which involved designing and implementation of data transfer lines between oil fields and control centers across country.

Oct2018-Jun2019 **ENGINEERS WITHOUT BORDERS**

PERTH, AUSTRALIA

Contributed to award-winning projects, including the **Mars Rover Prototype** and **Water Treatment Project** in Perth, where I enhanced design skills, problem-solving abilities, and teamwork and leadership capabilities.

S K I L L S

LEADERSHIP	Knowledgeable with project management and leadership skills that can lead to highly remarkable innovative solutions
HARDWARE	Experienced with logic designs for Field-programmable gate (FPGA), Printed circuit board (PCBs)
PROGRAMMING	Experienced with HTML, C , C++, Python, Assembly, and Verilog/ VHDL languages
SOFTWARE	KiCad, Xilinx Vivado, Fritzing , Code Composer Studio, Fusion 360, TinkerCad, Unix shell, GitHub and Microsoft general applications

P R O J E C T S

WEBSITES	Front and back ends coded websites : (1) Cultural Division at the Embassy of of the Sultanate of Oman in Washington D.C, (2) Omani Student Society in Western Australia.
MARS ROVER	The Mars Rover/ Lander simulates the full-size rover being deployed with a human astronaut and equipment payload without damage at a landing angle of 45 degrees.
WATER FILTER	An affordable household water treatment system presented to Engineers without Borders to provide the residence of Suco Holurua (Timor-Leste) with safe drinking water.
AEROPONICS	ESP32-Controlled Hydroponic System which aims to create a plant-growing system using microcontroller ship to control and interface environmental needs.
ROBOTIC ARM	A prototype robotic arm that can be used for shapes detection with an ESP32 camera and collection of different objects.
ROBOTIC CAR	Uses advanced analysis and obstacle avoidance for safe orbital operations. The MasterPi robot demonstrates a long-term satellite management and debris mitigation.
SOUND FILTER	Involved design, simulation, construction, and testing of a sound- frequency-selective light system. Allowing illumination of LEDs based on low, band, high pass frequencies.
ARM ASSEMBLY	Utilized BeagleBone Black GPIO, interrupts, and timers for real-time LED control, showcasing skills in assembly language and hardware interfacing.
PARKING SYS	Designed a PCB for a Parking Counter system, integrating IR sensors and microcontroller for real-time parking space monitoring, displayed on an web app.

Projects repository: github.com/codr-void/projects