Mohammed Alawami

Address

541-908-5497

Mohammed.h.awami@gamil.com ✓

Linkedin.com/in/Malawami in

Education

JUNE 2019

B.S. Electrical and Computer Engineering / Oregon State University JUNE 2019

Minor Computer Science / Oregon State University

Experience

SEP 2018 - PRESENT

Student Developer / Enterprise Computing Services, Corvallis

Design and deliver APIs and improving existing APIs to meet the client's needs to provide them with tools they need to create their applications.

Skills

- Web development: Designing and implementing a multi-tier application using HTML, CSS, JavaScript, and creating a client and server-side
- Programming Languages: Assembly, C, C++, JavaScript, Python, Embedded C.
- Software verification and validation, including: test plan development, test design, construction, debugging and maintenance.
- Programming microcontrollers

Projects

Automated Greenhouse

Sep 2018 - May 2019

Designing a system to monitor the environment inside a greenhouse, and automate the process to grow a plant from a seed to a grown plant. The system includes soil moister level sensors and a temperature sensor connected to wifi modules to communicate with the hub. The hub records the data from the sensors and uploads the data to a server for the user to view, and controls an irrigation system and an exhaust fan.

Shell program

Programmed my own small shell program, with fewer features than the actual shell. The implemented features are: cd, status, exit, redirection, foreground and background processes, and some signals.

OTP Encryption Program

Created five programs, two clients and two servers that encrypt and decrypt information using a onetimepad, and a key generator.

Alarm Clock with FM Radio

Oct 2017 - Dec 2017

Designed and built a stereo FM alarm clock radio with inside/outside temperature indications using two AVR microcontrollers, ATMEGA 128 and ATMEGA 48. Included features, volume control, clock control, brightness auto control, and used 7-sigment display and an LCD. Communication protocols that were used were UART, SPI, I2C, as well as Timer/Counter, PWM and ADC.

Power Supply

Sep 2016 - Dec 2016

Designed and built a two channel power supply, designed a rectifier with a positive and a negative channel, providing 16 volts to a voltage regulator to output voltage from 2V-12V.