

# Arjun Mahal

B.S. in Mechanical Engineering arjunmahal5@gmail.com (908)-304-4987

#### PROFESSIONAL SUMMARY

I am a mechanical engineer with a strong critical thinking mindset who has a passion for programming. With my rational problem solving methods and knowledge of several languages, I hope to apply my skills towards a career in software development.

### PROGRAMMING EXPERIENCE

**Python Training** August 2022

- Exposed to data science, automation, website creation, and game development
- Completed "100 Days of Code" Udemy course

## Inova Hospital HVAC Sequence of Operation

July 2022

- Developed code to control the seasonal operation of 12 commercial air handling units
- Programmed over 360 data points to operate based on environmental factors and demand such as humidity, temperature, and dewpoint.

## **Linux Command Line Training**

June 2022

- Wrote and automated both Bash and Python scripts
- Downloaded and compiled software from an external source
- Can navigate the linux file system efficiently

## **Automatic Plant Watering System**

December 2019

- Designed a mechatronic device involving sensing, actuation and a visual output
- Implemented 2 servo motors, a pump, an ultrasonic sensor and a thermistor into the design
- Wrote Arduino code to activate watering at a certain temperature or time

### **TECHNICAL EXPERIENCE**

## Siemens Industry Automation Specialist

August 2021 - Present

- Create operational code containing over 1000 statements to automate commercial HVAC systems
- Collaborate with building engineers to solve building specific issues
- Initiated the sale of over 50 HVAC products to various commercial buildings

### Capstone Project: New Medical Kiosk Device

August - December 2020

- Lead the design of an automated medical percussive device used to diagnose abdominal organ quality
- Created a 44 page report outlining how the device would operate as a public kiosk health product
- Presented our design to the University of Maryland Engineering School

#### **SKILLS & HOBBIES**

Proficient:	Semi-Proficient:	<b>Hobbies &amp; Interests:</b>
Python	Matlab	3D Printing
Linux	C++	Real Estate
Arduino	SolidWorks	Golf

### **EDUCATION**

University of Maryland - College Park

August 2017 - May 2021

B.S., Mechanical Engineering

GPA: 3.53