### **OMAR YOUNIS**

San Diego, CA 92130 | Tel: (858) 366-8728 | Email: <u>omar.s.younis@gmail.com</u>

LinkedIn: https://www.linkedin.com/in/omar-younis/ | Portfolio:

#### **SKILLS:**

Python, SQL, Machine Learning, Natural Language Processing, Deep Learning, Computer Vision, Neural Networks, Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, Yolov5, Git, Github, Tensorflow, Keras.

### **PROJECTS:**

### General Assembly, Remote

August 2021 – October 2021

Data Science Immersive Program

- ASL Letter Detector: Created a lightweight app that detects ASL letters from an image or video for the
  purpose of helping student practice the various hand positions for the letters; using Python, Streamlit and
  Yolov5.
- REDDIT NLP: Used natural language processing and machine learning to classify reddit messages from two similar forums; using Python and Tensorflow.
- California Wildfire Likelihood Predictor: Used Python with machine learning to create a prediction of the likelihood of a California wildfire occurring based on weather data and previous wildfire data.

#### **EXPERIENCES:**

# D&K ENGINEERING Mechanical Engineer II – R&D Department

San Diego, CA Feb 2019 – May 2021

- Managed the mechanical engineering team to improve the design of a client's kiosk system for cost-reduction, manufacturability, and function. Interfaced with management, drafting, production and purchasing to help coordinate efforts. Interfaced with the client to keep them informed on project status.
- Provided CAD, design and drawing support on multiple projects, using SolidWorks, which consisted of fixtures, medical devices, and consumer products.
- Created a variety of Python scripts to maintain and clean BOMs, created apps with GUIs to log data scripts significantly reducing labor time, processed data, and tracked updates for purchasing.
- Designed a chip testing fixture in SolidWorks as part of the mechanical engineering team.
- Designed a printer capping system for cartridge system for a 3D printer. Created test protocols to test different areas of the 3D printer. Worked with fine toxic metal powder in a clean room environment.
- Designed a tool to swap hot molds to which decreased production time by 75%.
- Performed cycle test, diagnosed issues, and tracked runs for a medical device.
- Tested and improved a micro fluidic delivery system for a medical device.

## **COBHAM ADVANCED ELECTRONIC SOLUTIONS**

San Diego, CA

## **Mechanical Engineer I**

Jan 2017 – June 2018

- Designed and fabricated fixtures to GD&T standards to aid in assembly of electrical sensors for radar used on military missiles and jet fighters.
- Designed and fabricated fixtures and molds to support environmental testing of critical electrical components, such as radar, to meet military standards.
- Supported testing of electrical components for military standards in vibration, shock, thermal, fatigue and others.
- Generated and reviewed technical content of drawings, engineering specifications, reports, engineering processes and other documentation related to electrical sensors.
- Supported plating lab, environmental lab, machine shop, assembly lines, and laser lab to ensure parts quality.

## UNITED STATES COAST GUARD AUXILIARY Flotilla Staff Officer – Operations

San Diego, CA June 2015 – Present

- Awarded the Coast Guard Meritorious Team Commendation
- Awarded the Coast Guard Unit Commendation

## **EDUCATION:**

Worcester Polytechnic Institute (WPI), Worcester, MA **Bachelor of Science, Mechanical Engineering**, May 2016

Concentration: Mechanical Design, Minor: Aerospace Engineering

General Assembly (GA), Remote

Data Science Immersive, Data Scientist, Oct 2021