182-08 64th Ave. Fresh Meadows, NY 11365

# **DAVID CHENG**

(929) 350-6229 dcheng33@yahoo.com

## **EDUCATION**

New York, NY New York Institute of Technology Expected May 2022

• Major: Electrical & Computer Engineering, M.S. (GPA: 4.00/4.00)

New York, NY New York Institute of Technology Sept 2017-May 2021

- Major: Electrical & Computer Engineering, B.S. (GPA: 3.89/4.00)
- Degree Honors: summa cum laude
- Presidential Honor List (2018-2021)

#### **WORK EXPERIENCE**

# Teaching Assistant

# **New York Institute of Technology**

Sept-Dec 2021

- Administered weekly tutoring sessions to Signals and Systems students to help keep them on track with course material and assignments.
- Assisted professor in assignment grading and file organization.

# **PROJECTS**

GitHub Page: www.github.com/daviecheng

### **Posture Corrector Device, Self-Project**

- Sdfsd
- Jh

# Wellness App, School Group Project

- Sdfs
- Sdfds

### **Automatic Blind Turner**, Self-Project

- Programmed ESP8266 microcontroller to wake up every hour from deep sleep and adjust the blind position according to the weather and time of day (Arduino).
- Utilized the OpenWeatherMap API to retrieve weather and time of day information by parsing JSON.

## **Autonomous Locking Knee Brace, Senior Design Project**

- Wrote an algorithm that distinguishes the user as falling or non-falling for a given sampling interval, and locks the preset flexion on knee brace when a fall is detected (Arduino, MALAB).
- Trained and implemented Random Forest machine learning algorithm with a 94.5% fall detection accuracy for my movements (Python, MATLAB).

#### **S**KILLS

• Software: (proficient): C/C++, HTML/CSS, MATLAB (familiar): Python, Java, Assembly (8051)

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