Summary:

Motivated professional offering a diverse skill set in both Scientific Research, Software Engineering and the

intersection of the two. Adds value to any organization in need of great collaboration, interpersonal and multitasking

abilities. Meets tight deadlines. Rapid learner. Striving for nothing less than excellence in the endeavors I embark on

Leadership Experience:

Founder, President, Union Neurotech (www.unionneurotech.com) 09/2020 - Current

Co - President, Union Rocket Club 09/2020 - 06/2022

Council Chair, Minerva Program 03/2020 - 03/2022

Board Member, LASO (Latin American Student Organization) 09/2021 - 01/2022

Founder, President, MARS (Mamaroneck Aeronautics and Rocketry Society)

Education:

Union College: Bachelors of Science Double - Neuroscience / Computer Science - 09/2019 to 06/2023

Skills:

Software Development and Design

Design and Operation of Brain Computer Interfaces

Signal Processing

Teamwork, Collaboration, Team Leadership

Data Collection and Analysis

Technology Repair

Artificial Intelligence and Machine Learning

Scientific Research, Technical Writing

Operating Systems: Windows, MacOS, Linux

Fluent in: Python, Java, Javascript, C, C++, R

High Performance Computing / Parallel Computing

Graphic Design

Computational Neuroscience

GIT and Version Control tools

Video Production and Editing (Adobe, Vegas Pro)

Task Automation

Multitasking and Organization

Project Planning

Robotics Software Design

Work Experience:

National Center for Adapative Neurotechnologies

Neurotechnology Researcher

Albany, NY

November 2021

Present

Working on research in the intersection between Neuroscience, Computer Science and Engineering utilizing state of the art methods and equipment for assistive and

adaptive Neurotechnologies. Optimized experimental Operant Conditioning System for improving muscle control in people who have neuromuscular disorders.

Developed software suite for conducting analysis on large datasets of electrophysiological activity with a focus in Evoked Potentials data for the purpose of optimizing

assistive communication Brain Computer Interface. Utilized and further developed skills in Scientific Writing, Software Engineering, Signal Processing, Interprocess Communication,

Documentation, and Research Methods in Neuroscience.

General Electric

Digital Technology Intern

Schenectady, NY

June 2022

August 2022

Developed multiple systems for automating data analysis pipelines in GE Vernova's Gas Power branch; paticularly with their Communications data.

Developed a software suite for automatically conducting analytics on data utilizing Python, Numpy, Matplotlib, Scipy and Pandas to name a few.

Successfully wrote an automation suite that demonstrated the capacity to optimize spending and save up to $1.2 Million in costs across GE Vernova Gas Power.

Utilized and further developed skills in Software Engineering, Signal Processing, Financial Analytics, Data Analytics, Task Automation, Cybersecurity.

Union College Maker Labs

Student Technician

Schenectady, NY

September 2022

Present

Assist with and maintain Engineering Machine Shop at Union College for Students and Faculty at Union College.

Utilized and further developed skills in Engineering Methods, 3D Printer Operation, Power Tools Operation, Mill Operation, Lathe Operation, Machine Shop Safety Methods.

Union College CAMLab

Student Research / Technician

Schenectady, NY

September 2021

June 2022

Developed tools for analyzing data in Psychology Research. Utilized experience in software engineering to parse through large research datasets.

Developed a remote-capable assessment tool for creativity.

Utilized and further developed skills in Data Analytics, Research Methods in Psychology, Web Development, Task Automation.

The BCI Guys

Content and Video Production

Remote

October 2020

March 2021

Contributed to content in the research and content writing stage of the Foundations in Neurotechnology course by The BCI Guys and NeurotechX.

Later contributed to the video production portion of the online course. Utilized and expanded upon skills with Adobe Premire, Scientific Communication

Union College Feller Lab

Student Research / Technician

Schenectady, NY

March 2021

June 2021

Assisted laboratory staff with development of technical components of Biology Research. Utilized AMIRA software for CT Imaging of Invertebrate organisms.

Utilized and further developed skills in Research and Methods in Biology Research, MicroCT Imaging, Scientific Writing and Documentation, Methods and saftey in the Wet Lab setting.

Union College ITS

Student Technician

Schenectady, NY

September 2020

March 2021

Provided technical assistance to students and faculty at Union College through the IT Services Department.

Utilized and further developed skills in IT Services, Technical Support and Repair, Customer Service, Communications.

XP0 Dynamics - Self Employed

Electronics Repair Technician

Larchmont, NY

September 2019

March 2020

Managed self run Electronics Repair Business. Repaired technology such as computers, phones and appliances for clients. Utilized and further developed skills in Customer Service, Windows, MacOS, Linux, Electronics Repair and troubleshooting.

Mobile Rescue

Electronics Repair Technician

Larchmont, NY

March 2019

June 2020

Repaired Computers and Mobile Devices for customers until the business closed in Summer of 2019. Utilized and further developed skills in Customer Service, Windows, MacOS, Linux, Electronics Repair and troubleshooting.

Ro Lab CUNY

Research Assistant Intern

New York, NY

June 2018

September 2018

Assisted laboratory staff with equipment, procedures and data analytics regarding Brain Computer Interfaces and psychology applications of EEG.

Assisted with TMS equipment and EEG applications for phosphenes stimulation and observation of Alpha activity relating to attention.

Utilized and further developed skills in Research Methods in Psychology, Electrophysiological data, Transcranial Magnetic Stimulation, EEG Setup and Recording, Communication.

Gulko Lab Mount Sinai

Research Assistant Intern

New York, NY

June 2017

August 2017

Assisted Laboratory Staff with equipment and lab procedures regarding Rheumatology, Protein Synthesis, Plasmid Vector Cloning, and Research in Rheumatoid Arthritis.

Utilized and further developed skills in Research Methods in Biological Sciences, Laboratory Procedures and Safety, Plasmid Vector Cloning, Wet Lab Experience.