MAX GINSBERG

mnginsbe@usc.edu | (310) 339 9837 | Personal Website: https://mginsy.github.io/

EDUCATION

University of Southern California, Los Angeles, CA

Expected Dec 2022

B.S. Biomedical Engineering (Electrical), Minor Entrepreneurship

GPA: 3.5

EXPERIENCE

Incoming Biomedical Engineering Intern, Edwards Lifesciences – Irvine, CA

May 2021

Product Assurance Engineer, Axonics Modulation Technologies – Irvine, CA

Aug - Dec 2020

- Validated the newest software for the Sacral Neuromodulation Clinician Programmer.
- Ensured accurate stimulation amperages, pulse widths, frequencies and resistances of Implantable and External Pulse Generators using oscilloscopes, multimeters and other custom circuitry.
- Soldered, assembled, and modified PCB's with the electrical team to test individual device features.

Instructor, Planet Bravo Summer Camp – Beverly Hills, CA

May 2016 – Aug 2019

- Taught 100+ students Java, Fusion360, 3D printing, Unreal Engine, Unity, and Scratch.
- Debugged student coding errors and worked with them individually to better understand computer software.

AWARDS & PROJECTS

Apollo, DrChrono's Virtual Healthcare Hackathon 2021, 2nd Prize

Jan 2021

- Created mobile and web apps using Javascript and CSS for patients to send their Apple Watch data to doctors.
- Manipulated the Apple Health data to create interactive graphs of users' steps, heart rate, blood pressure, blood glucose, and sleep with a selectable range of calendar dates.
- Recognized for the *Doctor's Choice* award out of over 500 participants.

Aerolyzer, Associated Students of Biomedical Engineering Makeathon, Most Innovative

Feb 2021

- Wired and coded an arduino + ultrasonic sensor to detect oxygen concentration in the air.
- Crafted a business plan to manufacture and ship aerolyzers to low resource communities globally for cheap oxygen analysis in the midst of the COVID-19 pandemic.

Circadian Rhythm Mouse Imaging Project

Nov - Dec 2019

- Analyzed an open-source dataset with Python to prove the circadian rhythm of a mouse brain to be 24 hours.
- Used Bokeh and Bebi103 libraries to calculate intensity values of the fluorescent protein Venus in the SCN over time, defined in user-chosen ROIs.

Smart Lock Aug-Dec 2020

- Created an IoT deadbolt lock controlled by your smartphone or any other internet connected device.
- Designed the mechanical aspect of the lock and fully assembled the electronics in cohesion with the mechanics.

Therabox, Associated Students of Biomedical Engineering Makeathon, 4th Prize

Feb 2020

- Constructed a therapeutic "puzzle box" for hemipelagic stroke patients struggling from muscular dystrophy.
- Fabricated the box in 36 hours using Fusion 360, laser cutters, and bandsaws.

LEADERSHIP & INVOLVEMENT

Director of Events, USC Makers

Aug 2019 - Present

- Increased attendance at club functions by 300% through efficient planning and creative advertisement.
- Organized a 200+ person online project showcase featuring students, professors and industry professionals in EE.

Mentor, Associated Students of Biomedical Engineering

Aug 2018 - Present

SKILLS

- Python, C++, Excel, Java, Javascript, MATLAB, Fusion360, 3D Printing, Arduino, Soldering, Entrepreneurship
- Bilingual: English (native), Spanish (fluent)
- Know the best taco stands and ramen spots in Los Angeles