MAX GINSBERG

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EDUCATION

University of Southern California, *Los Angeles, CA* **Expected Dec 2022**

B.S. Biomedical Engineering (Electrical), Minor Entrepreneurship **GPA: 3.5**

EXPERIENCE

Data Science and Algorithms Intern, Edwards Lifesciences – Irvine, CA **May – Aug 2021**

- Developed a modular, user-friendly data cleaning and dashboard visualization tool to view live data in any ongoing or finished data collection trial using Python, Plotly Dash, and HTML.
- Discovered new features and revealed biases in current algorithm development by applying machine learning (univariate logistic regression) onto dashboard and extracting best collected features for disease classification.

Director of Events, USC Makers – Los Angeles, CA **Aug 2019 – Present**

- Led club to increase budget by 300%, community engagement by 300%, and project scope by 200%.
- Awarded $8k from Qualcomm and Microsoft after Spring Showcase 2021, our club's first corporate sponsors.
- Took personal initiative and joined Executive Board within 1 month of joining the club.

Product Assurance Engineer, Axonics Modulation Technologies – Irvine, CA **Aug - Dec 2020**

- Soldered, assembled, and modified PCB's with the electrical team to test individual device features.
- Ensured accurate stimulation amperages, pulse widths, frequencies and resistances of Implantable and External Pulse Generators using oscilloscopes, multimeters and other custom circuitry to submit to the FDA.

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 React for patients to send their Apple Watch data to doctors.
- Visualized the Apple Health data into 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.

USC Makers Spring Showcase 2021 **Apr - May 2021**

- Managed 20+ club members to livestream a project showcase for 300+ live virtual audience.
- Animated graphics, rigorously tested technology, and created a professional image for the young club.

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.

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.

Pass the Butter Robot **Jan – May 2021**

- Created and fabricated a robot inspired by Rick and Morty to pass a butter tray across a table.
- Designed a moving head + arm mechanism and organized the physical layout of the robot prior to assembly.

SKILLS

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