## Luke Sirand

Website | GitHub | LinkedIn

## Education

University of California, San Diego — B.S. in Mathematics and Computer Science September 2017 - June 2021

• NCAA Athlete for Men's Epee team (2021) and Junior Olympics top 64 finisher.

## Experience

OpenText, San Diego — *Intern* September 2020 - PRESENT

- Use Selenium Web Driver, Python, MySQL, Docker, AWS EC2 and Pandas to implement a PyTest and Allure automated testing framework for a cloud access security broker (CASB).
- Develop a desktop application using the Python Tkinter framework and Fiddler to aid web analysts with uploading and processing HAR files to CASB database.
- Create a web application using Facebook's JavaScript SDK and the Facebook/Instagram Graph API for CASB testing of login and post sharing options.
- Use Google Developer Tools to capture web traffic, and query web requests into a MySQL database and use CLI tools to analyze and filter requests into different blocking categories.

Computer Science and Engineering Department, UCSD - Instructional Assistant

December 2020 – June 2021

- Use Node.js, Discord's API, and Heroku to develop and deploy a Discord bot that scrapes student run Discord servers for academic integrity violations.
- Provide insight on material covered in class and provide programming assistance to students.
- Guide students in labs focusing on industry technologies (Git, Linux, C, Java, Python, etc.).

The General Store Cooperative, UCSD — Software Developer

September 2019 - September 2020

- Implement and maintain a database for +200 vinyl records, video games, and CDs using Amazon RDS, MySQL, and Python.
- Build a CLI tool in Python to perform query operations on database and train employees on its usage.
- Develop a front-end web app using HTML/CSS/JavaScript to calculate product taxes.
- LA GOAL, Los Angeles Intern and Teaching Assistant

June 2017 - September 2017, June 2018 - September 2018

- Empower adult artists with learning disabilities through artistic expression via crafts, t-shirt making, weaving, and painting.
- Create an inclusive learning environment for all artists for two consecutive summers.

## Projects

wavBase — Lead Full-Stack Developer and Database Architect

September 2020 – December 2020

- Use React.js, Node.js, Firebase Real Time Database, and Firebase Storage to build a music sharing website for class CSE110.
- Receive highest recognition for team contributions.

Capo.glo.gang Music Bots — Personal Project

September 2020 – December 2020

- Implement a Discord Bot using discord.js, Genius API, and YouTube Data API that listens for user commands in Discord and replies with lyrics and songs from a particular niche artist (<u>GitHub repository</u>).
- Implement a Twitter Bot using the Twitter API, Genius API, and YouTube Data API that uses cron jobs/node scheduler to periodically post Tweets with lyrics and songs from a particular niche artist.

HackXR 2019 Hackathon — *Software Developer* 

May 2019

- Design gravity-defying particle manipulation algorithm using Unity and Oculus VR headset.
- Write scripts in C# for gravity defying aspects of particles using force vector arithmetic and physics principles.