

Luke Sirand

Ambitious and driven mathematics and computer science major seeking to gain valuable experience in back end software engineering. My goal as a professional is to create innovative solutions and make positive technological impacts.

(310) 745-3506

lsirand@ucsd.edu

<https://www.linkedin.com/in/luke-sirand-a611b2139>

San Diego/ Los Angeles

EDUCATION

University of California, San Diego, San Diego — *Bachelor of Science in Mathematics and Computer Science*

September 2017 - June 2021

EXPERIENCE

OpenText — *Web/ Cyber Security Analyst Intern*

September 2020 - PRESENT

- Use Selenium Web Driver, Python MySQL library, and Pandas Library to implement a CLI test tool that fetches blocking URLs and login credentials from a database and runs automated tests on web apps to determine if the URLs function as intended.
- Use Google Developer Tools to capture web traffic data, identifying the functionality of web applications through its web requests.
- Query web requests into a MySQL database and use CLI tools to analyze and filter requests into different blocking categories.
- Write rules using these requests to block certain functionalities of a website (Login, Search, Download, Like, etc.).
- Work directly with Software Engineers and Quality Assurance Engineers to test these blocking rules via a web browser plug-in.

CSE Department Tutor, UCSD

Dec 2020 - PRESENT

- Accepted to a highly selective program with a less than 5% acceptance rate.
- Provide insight on material covered in class to students and provide programming assistance across.
- Assist students on debugging their programs by reading their code and providing constructive feedback on what they could possibly change.

The General Store Cooperative, UCSD — *Software Developer*

September 2019 - September 2020

- Implement and maintain a database for +200 records (vinyls), video games, and CDs using Amazon RDS, MySQL, and Python.
- Developed a CLI tool in Python to perform query operations and teach other employees how to use this tool.
- Used MySQL's foreign key relationships to link customers to record/video games they want to keep on hold.

LA GOAL, Los Angeles, CA — *Intern and Teaching Assistant*

June 2017 - September 2017, June 2018 - September 2018

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

PROJECTS

Sow (iOS App) — *Personal Project*

- A productivity app utilizing the "Pomodoro Technique"
- Authored the idea, designed the app's UI, and implemented it using Xcode, Swift, and Cocoapods. Used Ableton to create custom ringtones for the app.
- Github Repository: <https://github.com/sirandluke/Sow>

HackXR 2019 Hackathon

May 2019

- Design gravity-defying particle manipulation algorithm using Unity and Oculus VR headset.
- Implement the player's body, hand grab mechanics, particle bodies, rigid bodies physics, and landscapes.
- Write scripts in C# for gravity defying aspects of particles using force vector arithmetic and physics principles (mainly kinematics and gravity).
- <https://devpost.com/software/hydro-bending-demo>

GITHUB

<https://github.com/sirandluke>

SKILLS

Strong understanding of

Python, C/C++, Java, C#, MySQL Databases, and Unity

Taken field related courses:

Advanced Data Structures, Theory of Computation, Enumerative Combinatorics, Mathematical Reasoning, and Basic Data Structures

AWARDS

Provost Honors, Revelle College for exceptional academic performance

United States Fencing Association All Academic First Team

Top 32 Junior Olympics in Fencing

LANGUAGES

Speak English (Native) and French (Proficient)

Extracurriculars

In my free time, I love to make music by myself or with my friends using programs like Ableton and FL Studio.

I was a Division I NCAA Fencer at UCSD