

# JAYLEN LUC

Los Angeles, California  
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## EDUCATION

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### University of California, Irvine

2020 - 2024

BS in Software Engineering

Information retrieval(A+), Data Structures and Algorithms, Design and analysis of algorithms

●Python●Java●C++

## EXPERIENCE

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**Research Assistant for SpArcFiRe (SPiral ARC FInder and REporter)**, UC Irvine — Advised by : Ph.D. Wayne Hayes whayes@uci.edu

Jan. 2023 – Present

●python ●numpy

Graphing differential reddening using segmentation to determine the near side of galaxies on the minor axis [Github Link](#)

Crossmatching Pan-starrs subset with all of SDSS for undergraduate research. Using Spherical Cosine distance, the program outputs the best possible matches for Pan-Starrs objects in the SDSS galaxy catalog for DR7. [Github Link](#)

**Computer Science Tutor**, UC Irvine

Sept. 2022 – Present

●communication●Peer Tutoring

Helped students understand confusing behavior from their own code, why it happened, and its fixes

## PROJECTS

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### Interactive pedagogical map with web scraping

Jul 2022 - Aug 2022

● Web Scraping ●Back-End Web Development ●Front-End Web Development●python

An interactive Map that uses 100 percent web-scraped and queried data and images designed for a convenient, intuitive, human-centric interface and access to country statistics and local news via the map interface with real-time updates. [GitHub Link](#)

### Bibliometrics Visualizer

Dec 2022 - Jan 2023

●User Experience ●User Interface Design ● Java Swing● Java

User Interface that allows users to receive their Hirsch index scores and percentiles along with 3 other abstract bibliometric determiners picked under my discretion to complement the shortcomings of the Hirsch index. Scores are plotted in annotated graphs. [GitHub Link](#)

### Cellular automata simulator

Apr 2023 - Present

●User Experience ●User Interface Design ● Java Swing● Java

Simulates artificial communal life forms and their behavior over time given very simple preset rules. Utilizes the C++ library SFML for terminal graphics. Optimized to utilize less RAM and CPU computations which resulted in faster and smoother runtime [GitHub Link](#)

### Vertical Search Engine on Birds

Jun 2023 - Present

●User Experience ●User Interface Design ● Java Swing● Java

Topicality based focused search engine to crawl, language process , index, rank, and retrieve web pages on the topic of the Class Aves [GitHub Link](#)