# JACOB VAN DER LEEUW UNIVERSITY OF ARIZONA STUDENT

Tucson, AZ

Tucson, AZ

June 2021 to July 2021

## **Employment**

MSRI-UP

Student Researcher

Participated in the MSRI-UP mathematics REU studying parking functions. Worked with a research team to create a paper, presentation, and poster on the work done. Also participated in panels devoted towards research, technology, and graduate school

CyVerse Student Software Engineer

Student Software Engineer Mar. 2020 to May 2021

Helped develop new and existing modules and libraries used by a CyVerse team in python. This involved coding in python, terminal, and git as well as github workflow configuration. Became familiar with docker containers and virtual machines used for more streamlined processing of data. Helped to develop an app via python's tkinter module in order to process geotiff image data and overlay the results on an interactive map by interfacing python and c code.

Harvey Mudd College

Computer Science Tutor

Claremont, CA Sept. 2019 to Nov. 2019

Worked as a computer science grader and tutor for Harvey Mudd College's computer science department tutoring introductory python and java classes

Harvey Mudd Summer Research Student Researcher Claremont, CA June 2019 to July 2019

Worked for Harvey Mudd College's computer science department to develop maze and game visualizations in python to be used for introductory high school and college computer science classes. Also developed an AI maze solver which completes the mazes from a given configuration.

## **Projects**

#### Selenium Webscraping

June 2020 to July 2020

Wrote and Modified Code to use Python's Selenium module to build bots that could access a variety of websites and provide login information and messaging capabilities

Website Dec. 2020 to Dec. 2020

Built a functional website as a final project for a web development class that used SQL to access a database of names and filter them based on information. This used a combination of HTML, CSS, Javascript, PHP, and SQL

## **Volunteering**

Casa Maria · volunteer Tucson. AZ Jan. 2013 to Current

**Contact** 

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O jvanderleeuw/jvanderleeuw.github.io

#### **Education**

Harvey Mudd College Sept. 2018 to Nov. 2019

Joint Major in Mathematics and Computer Science

University of Arizona

Jan. 2020 to Current

Mathematics 2022 Computer Science 2022

### **Skills**

#### PROGRAMMING LANGUAGES

Python

Java

C

HTML

CSS

**Javascript** 

PHP

LaTeX

Bash

#### WORKSPACES

**Mac + Windows Terminal** 

Git

**Virtual Machines** 

Docker

#### **MATHEMATICS**

Calculus

Linear Algebra

**Differential Equations** 

Cryptography

**Proofwriting** 

Volunteer once per month at a local organization making meals for charity