# RYAN GILLESPIE

*Software Developer*

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⬡ Ryan-Gillespie

## EDUCATION

BS Computer Science

UW Madison

📅 December 2021

🎓 GPA (4.0 scale): 3.2

## SKILLS

**Experienced**

Python

Java

JavaScript

SQL / MySQL / SQLite

RESTful APIs

**Some Experience**

Typescript

C

C++

C#

React

GraphQL APIs

## Volunteer Work

**Counselor | Camp Invention**

Assisted teachers and Elementary School-aged students in their STEM activities including constructing catapults and disassembling microphones.

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## PORTFOLIO | ryan-gillespie.github.io

## WORK EXPERIENCE

**Varsity Tutors | Computer Science Tutor**

📅 May 2021 - current          📍 Online

- Tutored high school and graduate level students in various languages such as Java, Python, and C
- Assisted in the Data aggregation phase of an Academic Machine Learning project using the Academic version of the Twitter API
- Maintained a 5-star review score across all students

**UW-Madison HSLC | Student AV Support Desk**

📅 September 2018 - current          📍 Madison, WI

- Maintained positive customer relationships by answering technical support questions relating to lecture and meeting hall equipment
- Kept accurate inventory of AV equipment for 7 lecture halls and 30 meeting rooms

**Wiens Family | Childcare Aide**

📅 January 2021 – May 2021     📍 Cross Plaines, WI

- Kept two elementary school students, one with special needs, on track of their assignments for online classes.
- Both Students are now on track for advanced classes.

## PROJECTS

### Pathfinding Algorithm Visualizer | Python

- Utilizes Pygame to power an intuitive UI that displays pathfinding algorithms simply and visually for the user
- Supports Popular Algorithms such as Dijkstra's, A*, Greedy Best First Search, as well as Depth and Breadth First Search

### Planetary Orbit Simulator | Java / JavaFX

- Simulates and displays the orbital paths of most major orbiting bodies in our solar system in 3D without a rendering engine
- Allows the user to switch focus between planetary bodies and correctly displays relative positions to other orbiting bodies
- Utilizes JavaFX to graph the solar system and other UI elements in real time

### Search Bar Backend | Java / Spring MVC

- Uses the Java Spring framework to implement a REST API that returns all possible words from a database of similar words with the MVC model
- Implements a simple and user-friendly graphical interface on top of the REST API
- Uses SQL to query a relational database to get results to display to the user

### Hassle Project Manager | JavaScript / React

- Aids in the organization of project tasks by organizing tasks into categories such as "To-do" and "In Progress"
- Uses React to build the front-end interface in the format of a Single Page Application