# 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 New Berlin, WI | July 2021

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

### 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

- i 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 H2 relational database to get results to display to the

## 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