# **Syscily Brown**

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Experienced software engineer with expertise in software design, object-oriented programming, debugging, databases, and full-stack development across multiple platforms. Eight years of specialized STEM instruction experience, achieving up to 35% improvement in student performance. Skilled in JavaScript, React, MySQL, AWS, Python, HTML, CSS, Flask, and PostgreSQL. Proficient in communication, curriculum design, and data analysis, offering a well-rounded perspective on software development..

#### **KEY SKILLS**

Javascript

React

MySQL

AWS

Python

HTML

CSS

Flask

PostgreSQL

### **CERTIFICATIONS**

AWS: Certified Cloud Practitioner, July 2023

#### **SELECTED PROJECTS**

## Recipes | Github

A full-stack web application that enables users to easily search and save recipes based on selected ingredients and macronutrients. The application has attracted hundreds of users, received positive feedback on usability and functionality, and has helped users save time and money by easily finding and organizing recipes.

- Integrated Spoonacular API into server-side using Python, Flask, PostgreSQL, Axios, and Restful API to enhance user experience with customizable recipe options
- Optimized data storage and retrieval with SQLAlchemy for a more streamlined and efficient application
- Designed intuitive user interface with Bootstrap for a clean and modern design, improving user engagement and satisfaction • Implemented secure user authentication using Bcrypt hashing, ensuring data protection and user confidence
- Utilized Jinja to create HTML templates, reducing repeated code and facilitating easier maintenance for a cost-effective solution

### Database DJ

A Flask application that enables users to effortlessly create and manage personalized playlists from a vast collection of tracks. This application has garnered a high level of user engagement and satisfaction with an average session duration of 35 minutes.

- Implemented data modeling to enable many-to-many relationships between songs and playlists
- Built a scalable and reliable server using Python and Flask, enabling the application to handle high volumes of data processing
- Optimized data storage and retrieval by seamlessly translating between object-oriented programming in Python and relational data in PostgreSQL using SQLAlchemy, enhancing the application's performance.
- Streamlined playlist creation and management by integrating WTForms, making the process more intuitive

# PROFESSIONAL EXPERIENCE District of Columbia Public Schools

July 2021 – Present

STEM Teacher

- Maintain composure and make deliberate, professional decisions within a rapid and occasionally uncertain setting
- Designed and implemented engaging and interactive lesson plans, focused on developing critical thinking and problem-solving skills
- Demonstrated exceptional written and verbal communication skills, facilitating seamless coordination with both internal and external teams.
- Identified the ramifications of new information for present and future problem-solving and decision-making

scenarios

- Utilized data analysis and visualization tools to assess students' learning outcomes and adapt teaching strategies accordingly
- Developed and maintained strong relationships with students, parents, and colleagues, providing individualized support and guidance as needed

# **New York City Charter Schools**

June 2015 - June 2021

Lead Teacher, STEM Specialist

- Collaborated with cross-functional teams to design curriculum to to address business challenges effectively
- Demonstrated attentive listening by dedicating time to comprehend the ideas expressed and asking relevant questions
- Facilitated biweekly professional development workshops to support teams with data analysis, resulting in students making an average of 1.75 years' worth of academic growth in one school year
- Employing logical analysis and reasoning to recognize the merits and limitations of different solutions, conclusions, or approaches when addressing problems
- Support teachers in effectively integrating technology tools, software, and resources into STEM lessons to enhance student engagement and learning outcomes
- Explore and recommend new educational technologies, virtual simulations, and hands-on kits to enrich the STEM learning environment

#### **EDUCATION**

Women's Empowerment Institute: Remote

AWS Cloud Practitioner Program

Springboard: Remote

Software Engineering Bootcamp

Relay Graduate School of Education: New York, NY

Master of Arts in Teaching

Howard University: Washington, D.C.

Bachelor of Science in Human Development, Allied Science Minor