# Cole Sandlin

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## **SKILLS**

Languages: Python, C, C++, Java, JavaScript, SQL, R, HTML, CSS

**Technologies:** Git, Node.js, React Native, pandas, NumPy, Matplotlib, R Shiny, Hugo

#### **EXPERIENCE**

## **Environmental Technologies Specialist**

Aug 2024 - May 2025

U.S. Environmental Protection Agency (via ORAU)

Cincinnati, OH

- Developed and maintained drinking water treatment performance models in R and Python, informing regulatory decision-making processes
- Enhanced model performance using optimization techniques such as vectorization, leading to a 300% reduction in execution time
- Created an R-based tool to compile and filter data from multiple sources, streamlining the workflow of researchers
- Identified and resolved critical bugs causing system crashes, increasing application stability
- Refactored code by extracting reusable components, improving code readability and maintainability

### **Physics Peer Tutor**

Jan 2020 - May 2020

Lexington, KY

University of Kentucky

- Provided drop-in peer tutoring for a variety of university-level physics courses
- Led small groups of students in mastering course concepts, completing assignments, and developing effective study skills

## **PROJECTS**

# **Pharmacy Quiz App**

- Designed a React Native-based mobile application, in collaboration with the National Association of Boards of Pharmacy, to act as a study tool for pharmacy students
- Implemented a Cloud Firestore database to store and serve user-generated content

# Streamflow Module for MagicMirror<sup>2</sup>

- Developed a smart mirror module using Node.js to display various water data for the user's current location
- Used REST API calls to the U.S. Geological Survey's Instantaneous Values Service to obtain real-time data

#### **Portfolio Website**

- Built a static website with Hugo to showcase projects and deployed it on GitHub Pages
- Implemented custom HTML and CSS elements to enhance user interface design.

#### **EDUCATION**

# **University of Kentucky**

Lexington, KY May 2023