Caleb Whittaker

Web Developer

✉ cmwhittaker00@gmail.com | 🏠 calebmwhittaker.online | ⬤ calebmwhittaker | in Caleb-whittaker

About Me

From the first "Hello World" program that I wrote back in college, I knew that I had found a new passion. When I branched out and discovered web development, it almost felt magical to write lines of code that I could visualize and proudly show my friends and family. In my free time, I build projects that excite me and learn new skills and technologies that will help me become a better programmer in the future.

Technical Projects

Portfolio Website

https://github.com/Calebmwhittaker/Portfolio

- Incorporated the Google Maps API with restricted keys
- Built a React application and deployed on Vercel

Chores List Web App

https://github.com/Calebmwhittaker/Chores-List

- Developed a full-stack web application with user authentication using JWT
- Utilized a MongoDB database to store user and chore information
- Managed state of application with Redux Toolkit

Countries Search Engine

https://github.com/Calebmwhittaker/Countries-API-Project

- Built initially with vanilla JavaScript and rebuilt with React
- Implemented a third-party API and displayed data visually
- Filtered countries from a search bar that takes in a user input

Digital Marketing Website

https://github.com/Calebmwhittaker/MADDMarketing-Solutions

- Built application with React using modern folder structure and best practices
- Utilized React Router to navigate through multiple pages from a navigation bar
- Formatted website with responsive design in mind using Bootstrap

Skills

HTML | CSS | JavaScript | React | SQL | NodeJS | MongoDB | Bootstrap | Python

Certifications

Introduction to CSS:
University of Michigan

Interactivity with JavaScript:
University of Michigan

Advanced Styling with Responsive Design:
University of Michigan

Getting Started with Python:
University of Michigan

Python Data Structures:
University of Michigan

Education

Bachelor of Science in Biochemistry   **May 2022**
Saginaw Valley State University   University Center, MI
Summa Cum Laude

Work Experience

Lab Technician Intern   **February 2023 - Present**

Gougeon Brothers Inc   Bay City, MI

- Responsible for testing a new method of quality control on samples that saved money for the company
- Calculated new limits for samples that will ensure the validity of future products
- Operated a differential scanning calorimeter to determine glass transition states of samples
- Organized three-years' worth of samples to increase productivity of all technicians in the lab

Lab Tech Associate   **May 2022 – January 2023**

University of Michigan   Ann Arbor, MI

- Responsible for establishing new genetics stocks for lab members to use for future experiments
- Performed lifespan experiments that produced data to elucidate mechanisms involved in aging
- Maintained stocks for lifespan and imaging experiments
- Analyzed data from lifespans and genetic crosses to plan new experiments

Lab Technician II   **April 2021 – May 2022**

Saginaw Valley State University   University Center, MI

- Contributed to optimization of ddPCR assays for detection of SARS-CoV-2 in wastewater
- Performed specialized ddPCR assays with proper aseptic techniques to generate time-sensitive results
- Successfully detected COVID-19 outbreak on SVSU campus from wastewater
- Communicated results from microbial source tracking to local health departments
- Trained technicians in the use of laboratory equipment to perform RT-ddPCR and qPCR assays

Lab Technician I   **April 2020 - April 2021**

Saginaw Valley State University   University Center, MI

- Notified local health departments of significant qPCR results which led to beach closures
- Sampled various locations around the Saginaw Bay Watershed in order to perform various PCR analyses
- Performed qPCR assays from a validated SOP for rapid testing of beach water
- Responsible for coordinating and receiving samples from wastewater treatment plants for SARS-CoV-2 pilot study

Honors/Awards

Recipient, Robert & Ellen Thompson Scholarship   **August 2018 – May 2022**
- Received scholarship for $5000 a year based on outstanding academics and work ethic

Recipient, Founder's Scholarship   **August 2018 – May 2022**
- Received scholarship for $5000 a year for outstanding academics

Recipient, Great Lakes Bay Regional Youth Leadership Institute Scholarship   **August 2018 – May 2019**
- Received scholarship for $1500 for an active and impactful role in the GLBRYLI program

Recipient, Outstanding Biochemistry Student   **May 2022**
- Received award for outstanding academic achievement in the biochemistry program