Dane Z. Dalton

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Professional Objective

With a background spanning digital circuits, CAD, controller programming, and software development, I've cultivated a deep passion for technology. I relish the challenges software brings, finding immense satisfaction in reaching my own creative solutions that simplify work-flow for colleagues and clients. Equipped with a diverse skill set, what I have to offer is potential. As a solo frontend developer on my current project for the past year, I've practiced the ability to learn and thrive in any environment.

Education

Iowa State University, Ames, IA | 2021 | Bachelor of Science: Environmental Science | Minor in Biology
The Odin Project - Developer Environment, HTML/CSS/JS, Git, and Ruby units complete

Work Experience

Adventures With Mr. Math, Remote - *Software Developer & Head TA (July 2022 - Present)*
- Built a multi-faceted portal for 500+ young students, parents, TA's, and teachers of Mr. Math primarily with ReactJS and TailwindCSS as a solo frontend developer, Dockerified for production.
- Functionality: sign in, sign up, auth, class scheduling and rescheduling, customized interactive worksheets, a mailbox system, and a campaign message system.
- Designed a child-friendly, easy to use UI/UX, and a common theme across the portal.
- Created a client-side caching system for the call-heavy worksheets. This noticeably improves the fluidity of working between multiple worksheet problems at the same time.
- Organize and streamline the dev experience with 3rd party tools including: Prettier, MaterialUI, date-fns, react-icons, and Axios.
- Scheduling, management, administration, organization, and interviewing skill growth managing the TA team.

Citizens For Conservation, Barrington, IL - *Restoration Intern Crew Lead (Summer 2020)*
- Lead a restoration crew to carry out prairie, wetland, and savannah restoration management plans.
- Use knowledge of invasive & native species, seed collection, and ecosystem functions to guide interns.
- Lead volunteer work days.
- Experience extracting and inputting data with ArcGIS.

Projects & Extracurriculars

Custom LED Light String: Decorative LED strip wired to an Arduino, using Arduino code (pseudo C++) and RGB values to create different light patterns. A semester-long project class, entirely self-directed and self-taught.

Etch-A-Sketch: A web app written in JS that provides an interactive color palette with an opacity setting that allows for modification of a sketch grid on a 'mouseover' event. The user/child friendly UI/UX from this app led to the opportunity to create the 'Adventures with Mr. Math' portal frontend. **Live Code**

Knight Travails: An application written in Ruby using Graph Theory to find the fastest path for a knight in a chess game to move from one square to another. Building this graph breadth first, the first occurrence of a finished game is found and the parent nodes are traced to output the quickest path from square A to square B.

Rock Climbing: At my local climbing gym I routeset one day a week. Creating challenges that other climbers get to explore and experience is incredibly rewarding. What I love about climbing is the opportunity to spend all day outdoors, set goals, studying every little pebble to get the most out of poor holds, and perfecting my movement to top the climb exerting as little energy as possible.

Skills

Software Skills: ReactJS, TailwindCSS, JavaScript, TypeScript, HTML, CSS, Docker (production), Git, Vite, Ruby, Rails, Linux OS, Bootstrap, C, C++, SQL, CAD, GIS, LaTeX, Salesforce Certified Administrator, Excel, Google Workspace

Hardware Skills: Arduino, Logic Gates, Solder, Breadboard, PC Building, Multimeter, Oscilloscope, Isometric Sketching, Autoclave

Interpersonal Skills: Leader, Interviewer, Communicator, Motivator, Critical Thinker