James Tipton

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ABOUT

A dynamic and highly motivated individual seeking an impactful web application development position. Motivated by intentional projects with real world implications and eager to utilize machine learning skills in beneficial and innovative ways. Confident, creative, capable, and continuously learning. Adaptable and a quick study, very detail-oriented, with a passion and drive for results. Prepared to take on a broad range of responsibilities using my analytical and collaborative skills, ability to work independently, and appetite for concrete challenges and opportunities.

TECHNICAL ABILITIES

- Languages: Python, C, JavaScript, TypeScript, HTML/CSS, C#, Java, Swift, SQL
- Tools: AWS, Azure, Google Cloud, Angular/Ionic, React.JS, React Native, MongoDB

EDUCATION

University of Missouri - Columbia

Bachelor of Science in Computer Science, *magna cum laude*

Bachelor of Science in Psychology, *magna cum laude*

Minor in Mathematics, Certificate in Neuroscience

Relevant Coursework: Advanced Algorithm Design and Analysis, Object Oriented Programming, Database Application & Information Systems, Software Engineering, iOS App Development, Operating Systems, Cloud Computing, Machine Learning and Pattern Recognition, Linear Algebra

EMPLOYMENT

- University of Missouri – *Honors Computer Science Researcher and Fellow* **Nov. 2021 to Jul. 2022**
  Worked in conjunction with the U.S. Geological Survey to develop an Angular app that takes images of water, employs a machine learning model to detect trace amounts of oil in the water, and stores the information in a database. All without specialized lab equipment.
- Country Day School – *Senior Counselor* **Summer 2019 and 2020**
  Organized and led large groups of students ages 6-13, trained other camp counselors and created programming. Liaised with parents and staff and resolved disputes, while promoting an enjoyable and safe environment for the students.
- University of Missouri Chemistry Department Glass Group – *Lab Assistant* **Fall 2019 to Spring 2020**
  Conducted independent projects, synthesized organic compounds used for neurotransmitter visualization, and used techniques including NMR, IR, and UV spectroscopy to verify and analyze these compounds.

ACTIVITIES

- First Place MLH Hackathon Winner **Nov. 2022**
  Received first place out of 80 teams in the University of Missouri Major League Hacking event by collaborating with three colleagues to construct a React Native Application that tracks user's CO_2 emissions from driving. By utilizing Google Maps API, I was able to develop the app's frontend mapping and location features as well as the statistics UI which displayed relevant information about the trip and emissions, based on calculations we developed as a team.
- Senior Capstone Project – Vacation Planner **2021-2022**
  An application built using a React.JS frontend and Python Flask backend server. The app's focus is to streamline group vacation planning and aggregate live data relevant to planning a trip. My main job on the project was building and designing the frontend, as well as connecting it to server functions.