

# James Tipton

573-999-2726 • [jamesc.tipton@gmail.com](mailto:jamesc.tipton@gmail.com)

## ABOUT

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A dynamic and highly motivated individual currently looking for full-time employment or internship opportunities. 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 and use my analytical and collaborative skills, and seeking a position that will utilize these qualities and skills that translate to real world challenges and opportunities.

## TECHNICAL ABILITIES

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

## EDUCATION

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### ***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

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- ***Honors Computer Science Researcher and Fellow – University of Missouri*** ***Nov. 2021 to Aug. 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.
  - Utilized Twitter API to gather, filter, and manage data relevant to positive Covid-19 cases to create a real-time map of self-reported coronavirus cases and relevant symptoms.
- ***Senior Counselor – Country Day School*** ***Summers 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.
- ***Research Assistant – University of Missouri Chemistry Department Glass Group*** ***Sep. 2019 to Apr. 2020***
  - Conducted independent projects, synthesized and purified organic compounds used for visualization of neurotransmitters, and used advanced techniques including NMR, IR, and UV spectroscopy to verify and analyze these compounds.

## ACTIVITIES

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- ***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 app that tracks user's CO<sub>2</sub> emissions from driving. By utilizing Google Maps API, I developed 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 research and calculations we developed as a team. I also worked to interface the backend database with the frontend.