John Harrington

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Missoula, MT 59812

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**Education**

* MS in Computer Science, May 2023 – University of Montana
* B.S.W. in Social Work, December 2016 – University of Montana

**Internships**

* Associate Security Consultant: LMG Security, Missoula, MT. Summer 2021.
* Data Analyst: Crayon, Remote. Summer 2020.

**Skills**

* Experience with low level programming using C and Rust, focused primarily on embedded systems (interfacing sensors and effectors with control logic) and operating systems (kernel and driver development).
* Scalable API development using Go, Flask, FastAPI, Amazon Web Services, Google Cloud Platform, Terraform, and Docker.
* Experience working with Swift, Kotlin, Dart, Python, Java, C++, SQL, HTML, CSS, JavaScript and various Linux command line tools since 2019.
* iOS development using Swift, SwiftUI, UIKit, Storyboards, Auto Layout, CoreData, and Realm by MongoDB. Experience integrating asynchronous network requests into app UI using DispatchQueue. Familiar with MVVM architecture and best practices. I have published six apps on the [App Store](https://apps.apple.com/us/developer/john-harrington/id1603002572).
* Passion for building software and writing clean code. I am continuously striving to learn new tools and frameworks, as well as improve my abilities with what I already know by working on a number of [personal projects](https://github.com/harr1424).

**Appointments**

* Teaching Assistant: University of Montana, Department of Computer Science, Mobile Application Development, Fall 2022.
* Teaching Assistant: University of Montana, Department of Computer Science, Introduction to Computer Science, Spring 2022.
* Student Evaluation Committee Member: University of Montana, Department of Computer Science, Fall 2021.
* Teaching Assistant: University of Montana, Department of Computer Science, Introduction to Computer Modeling, Spring 2021.
* Teaching Assistant: University of Montana, Department of Computer Science, Introduction to Computer Modeling, Fall 2020.

**Research**

* Research Assistant: University of Montana, Department of Computer Science, November 2020 to March 2021. The research topic involved the construction of an Agent Based Model to predict COVID19 transmission in a university setting. The article was not published as by the time it had been reviewed, the results were no longer relevant.

**Coursework**

* Operating Systems, Spring 2023
* Embedded Systems, Spring 2023
* Digital Architecture, Fall 2022
* Internet of Things, Fall 2022
* Independent Study: Mobile Application Development (Android), Spring 2022
* Software Reliability and Testing, Spring 2022
* Cloud Computing, Spring 2022
* Code Optimization in C++, Fall 2021
* Introduction to Machine Learning, Fall 2021
* Database Security, Fall 2021
* Analysis of Algorithms, Spring 2021
* Database Design, Spring 2021
* Data Structures and Algorithms, Fall 2020
* Discrete Mathematics, Fall 2020
* Programming with C++, Spring 2020
* Computer Architecture, Spring 2020
* Advanced Web Programming, Spring 2020
* Integral Calculus, Spring 2020
* Differential Calculus, Fall 2019
* Fundamentals of Computer Science II (Java), Fall 2019
* Fundamentals of Computer Science I (Python), Summer 2019