

HRIDAY CHHABRIA

+1(650) 861-0386 ♦ hridayc@umich.edu ♦ [LinkedIn](#) ♦ [GitHub](#)

EDUCATION

Bachelor of Science in Computer Science, University of Michigan, Ann Arbor Expected May 2024
Relevant Coursework:, Data Structures and Algorithms, Software Engineering, Computer Architecture, Discrete Math, Linear Algebra, Probability and Statistics

SKILLS

Languages *3+ years:* Swift, C/C++, Java, *1+ year:* Javascript, R, MatLab, HTML, CSS,
Frameworks Firebase, Realm, Express, SwiftUI, CoreML
Tools Git/GitHub, Visual Studio Code, XCode, R-Studio, Linux

EXPERIENCE

Research Assistant, University of Michigan Transportation Research Institute Oct 2021- Present

- Worked with Dr. Monica Jones on data pre-processing using NumPy and Pandas to help her Computer Vision project used to detect signs of motion sickness in passengers in Autonomous Vehicles
- Co-Developed a new statistical analytics tool in Matlab based on Fleiss' matrices and tested it with a human in the loop pipeline, on 25+ unique video meta datasets
- Followed strict documentation standards to ensure my tool's utility and re-usability

Co-Founder and Principal Engineer, EduCreate Tutors March 2020 - May 2021

- Founded a tutoring service to help low-income students connect with remote tutors during the Covid-19 pandemic
- Developed and published an iOS app using SwiftUI for the front-end, and TypeScript and Python for the back-end
- Employed a unique matching algorithm to match 500+ monthly active students with tutors

Tutor, Data Structures and Algorithms Course July 2022 - Present

- Helped facilitate a positive and inclusive learning environment as a tutor to 50+ students per semester
- Assisted students debug large projects (1000+ lines of C++) across topics such as trees, graphs, complexity analysis, and dynamic programming etc.

PROJECTS

MWordle Feb 2022 - Present

- Helped build a UMICH based Wordle clone as a part of the Michigan Hackers iOS sub-team
- Ensured local data persistence to maintain user streaks and scores using MongoDB Realm
- Implemented functional guess checking logic utilizing the XCTest to thoroughly test the app

SQL Simulator March 2022

- Developed a fully functional SQL relational database simulator in C++
- Optimized operation speed through a fast data lookup using Hash Tables and Unordered Sets

The LyriSwift: Lyric based mobile game Dec 2021- Present

- Built an iOS game powered by Firebase and Musixmatch's developer APIs, where users compete to complete song lyrics when promoted with a song cue using

HOBBIES

YouTube Content Creation, Basketball, Pickleball, Biking, Board Games