

Varun Ritesh Gandhi

☎ (703) 453-2465 | 🌐 vgandhi13.github.io/Personal-Website | ✉ gandhivarun13@gmail.com | 🏠 github.com/vgandhi13 | [in](https://www.linkedin.com/in/varunriteshgandhi)
[linkedin.com/in/varunriteshgandhi](https://www.linkedin.com/in/varunriteshgandhi)

EDUCATION

University of Massachusetts Amherst

Feb 2021 – May 2024

Bachelor of Science in Computer Science and Math (Minor in Business)

GPA: 3.9

Distinctions: Dean's List Honors, Chancellor's Award Scholarship (\$56,000)

Coursework: Operating Systems, Software Engineering, Data Structures, Computer Networks, Algorithms, Programming Methodologies, Artificial Intelligence, Computer Systems Principles Probability and Statistics, Discrete Mathematics

SKILLS

Languages:

Python, JavaScript, TypeScript, Java, C/C++, HTML, CSS, SQL

Frameworks/Libraries:

React.js, Node.js, Flask, Bootstrap, Django, Express.js, Mongoose

Cloud/Technologies:

Git, Docker, MongoDB, Linux/Unix Systems, Agile, Postman, AWS

WORK EXPERIENCE

Manning CICS

Undergraduate Teaching Assistant

May 2023 - Present

- Undergraduate Teaching Assistant for CS-377 Operating Systems
- Lead Group discussions and lab assignments and created course content for discussion sections and practice for exams
- Provide academic support to students through my office hours or the class forum and grade assignments and exams

UMass Advanced Learning

Undergraduate Research Assistant

Aug 2021 – May 2022

Technology Lab

- Developed games on WearableLearning to test platform's effectiveness for teaching K-12 science through mobile games
- Conducted IRB approved study with graduate students from UMass College of Education for user feedback on games
- Presented research findings and poster to UMass faculty and ERSP National Conference

UMass Residential Life

Peer Mentor

Jan 2022 – present

- Supported 500+ first-year students through their transitions to the rigors of university academics through academic success mentoring
- Managed crises/emergencies, and helped foster inclusive and safe residential communities

PROJECTS

PunchTime (github.com/PunchTime)

React, NodeJS, MongoDB, Mongoose, Axios

- Built an employee time tracking management dashboard for Duck Creek Technologies using React, HTML and CSS in a team of 9 developers by constructing methods for large-scale UI components consuming served JSON.
- Programmed the server-side logic for the portal using NodeJS and Mongoose, and dockerized both client and the server
- Created 6 API endpoints and used Postman to test performance; used Axios for frontend-backend data communication.

Binary Buddy Allocator (github.com/377)

C++, C, Makefile

- Created an implementation of a memory allocator in C++ using the binary buddy algorithm by creating a binary tree data structure struct to store offsets for free memory blocks
- Implemented recursive functions to iterate through the binary tree and find free nodes from the list for memory allocation.

COVID 19 test

C, [Multithreading]

- Created a simulation, where multiple people contacted a local health center and made an appointment for a COVID Test at the same time using a phone appointment system
- Implemented using threads, synchronization, and critical sections, where each phone call was a thread
- Synchronized all the phone calls in the appointment system, using semaphores
- Developed the appointment system to consist of a limited operators, and limited number of lines

The Simon Game (github.com/TheSimonGame)

HTML, CSS, JavaScript, JQuery

- Created an online single player version of the classic Simon Game using Javascript, CSS, AND HTML
- Utilized JQuery for CSS Animation and DOM interaction to enhance user experience

CERTIFICATIONS

The Complete 2023 Web Development Bootcamp - Udemy

Jan 2023

Software Engineering Virtual Experience Program - JP Morgan Chase & Co (Forage)

Jan 2023