

# Jonathan Malcomb

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## EDUCATION

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### WEST VIRGINIA UNIVERSITY – Morgantown, WV

*Expected Graduation May 2022*

- Bachelor of Science in Computer Science
- GPA: 3.12/4
- Coursework: Software Engineering, Analysis of Algorithms, Computer System Concepts, File and Data Structures, Principles of Programming Languages, Calculus 3

## SKILLS

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**Languages:** Java, C, C++, JavaScript, HTML, SCSS/CSS, SQL

**Tools:** Tailwind, React, React Native, Expo, Spring, VS Code, Git, Github, Firebase, MariaDB, MongoDB, MS SQL Server

**Methodologies:** TDD, MVC, Agile, Scrum

**Operating Systems:** MacOS, Windows, Ubuntu, Kali, iOS, Android

## PROFESSIONAL EXPERIENCE

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### Software Developer – West Virginia University

*October 2020 – Present*

- Gathered requirements/specification on website/application design and implementation from customers
- Created and translated wireframes/mockups into fully realized web/phone applications
- Collaborated with other team members on domain of websites/applications

### Software Engineer Intern – MicroGenesis, Startup

*February 2020 – April 2020*

- Developed software that allowed an Arduino module to communicate with a transponder
- Reconfigured and debugged a MS SQL Server to allow it to correctly generate relationship diagrams
- Developed static HTML pages using HTML, Bootstrap, and JavaScript

## PROJECTS

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### Database Management System

*Spring 2019*

- Developed a Relational Database Management System in Java
- Implemented a way to export and import XML, and JSON files back and forth in/out of the database
- Created a custom hashing function that used quadratic probing to solve the problem of collisions
- Transitioned the DBMS to be persistent by translating data stored into a binary file stored on the local machine

### Pizza Website

*June 2020*

- Web application for a fictional pizza restaurant, using JavaScript, SCSS, and the Leaflet API
- Using a React-like approach, created JS component classes that would render upon clicking a button on the website

### Hospital Requisition App

*January 2021*

- Phone application for use in a Hospital to improve pre-operation setup
- MERN stack for development – using MongoDB, Express, React Native, Node, and Firebase Auth for authentication

## ACTIVITIES

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### CyberWVU – Member

*November 2020 – Present*

- Participated in MACCDC 2021 as a competitor
- National Cyber League 2021 Spring competitor