NIGEL CHARLESTON

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Game Portfolio: https://nigelcharleston.dev/

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EDUCATION

University of Michigan – Ann Arbor, MI (GPA: 3.264/4.000)

Bachelor of Science - Computer Science *December 2020*

- **Courses:** Computer Game Design and Development, Matrix (Linear) Algebra, Data Structures and Algorithms, Operating Systems, Multidisciplinary Engineering Project, Computer Security
- **Activities:** WolverineSoft (game development), National Society for Black Engineers, Computing for All

SKILLS

- **Languages**: C, C++, C#, Python, JavaScript
- **Frameworks and Technologies:** Unity, Angular, Node.js, MongoDB
- **Software**: Linux, Windows, Jira, Git, Microsoft Visual Studio,

PROJECT EXPERIENCE

Qualcomm – Camera Software Team, Remote (Redford, MI)

Software Engineering Intern *May 2020 – Present*

- Develop a debugging tool with Python that can parse and analyze core dumps, enabling customer engineers to troubleshoot errors triggered within Qualcomm's camera software
- Revise tool design and functionality to satisfy the requirements of customer engineers and improve the maintainability of the tool

WolverineSoft Studio – Ann Arbor, MI + Remote

Io (Windows, MacOS)

AI Programmer (57 Developers) *January 2020 – April 2020*

- Programmed the attack and movement behaviors for two enemies present in the final game, using the Unity Engine and C#.
- Fine-tuned the functionality of enemies in the game, determining their right level of difficulty and improving their design.
- Revised the implementation of the enemy AI across an Agile development cycle, iteratively improving their behavior.

University of Michigan, Ann Arbor, MI

The Magic Hat (Windows, MacOS)

Gameplay Programmer (5 Developers) *October 2019 – December 2019*

- Implemented player movement controls, a game controller object that manages the state of the game, and bug fixes that improved the playability of the game
- Utilized an iterative development cycle based on weekly player feedback to quickly implement and improve the game's mechanics

WORK EXPERIENCE

University of Michigan – Electrical Engineering and Computer Science Department

Instructor Aid for EECS 281 – Data Structures and Algorithms *September 2019 – June 2020*

- Led weekly discussion sections to groups of 20+ students on data structures, algorithms, and C++ programming concepts, improving their understanding of material covered in lecture
- Conducted remote office hours (2 hours a week) to support students with the course's C++ projects, lab assignments, and theoretical concepts
- Wrote midterm exam questions to challenge over 700+ students in their understanding of the course material

University of Michigan – Electrical Engineering and Computer Science Department

Grader for EECS 494 – Computer Game Design and Development *January 2020 – May 2020*

- Evaluated and graded computer game projects developed by 100+ students taking the course for assignment requirements
- Communicated feedback to students regarding their project submissions, allowing them to learn from their mistakes and improve upon their games' design and gameplay in future deliverables