

EDUCATION:

University of Michigan Ann Arbor - College of Literature, Science, and Arts August 2021 - May 2025
Bachelor of Science, Computer Science (GPA 3.9/4.0)
Winner of 2024-25 William L. Everitt Student Award of Excellence

Computer Science Classes:

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| - Computer Game Development (EECS 494) | - Game Engine Architecture (EECS 498) |
| - User Interface Development (EECS 493) | - Computer Organization (EECS 370) |
| - Discrete Math (EECS 203) | - Natural Language Processing (EECS 487) |
| - Data Structures and Algorithms (EECS 281) | - Software Engineering (EECS 481) |
| - Foundations of Computer Science (EECS376) | - CS Course Development IS (EECS 499) |

WORK EXPERIENCE:

EECS 298 (3D Technical Art and Animation) – Course Developer December 2024 – Present

- I worked with Professor Austin Yarger to develop EECS 298 (eeecs298.com), a 3D technical art and animation course now being taught at the University of Michigan.
- I created homework assignments, 3D model and code assets for students to use in projects, and lecture content surrounding Blender, Unity, and animation/game development fundamentals.

University of Michigan College of Engineering - Instructional Aide September 2022 – May 2025

- Instructed discussion sections for introductory and intermediate Computer Science courses EECS 183 and EECS 280, created and presented high quality lecture material about the foundations of C++ programming for a diverse class of 30+ students at a time.
- Fostered an engaging and productive learning environment through group office hours sessions and taught students debugging in virtual and in-person office hours.
- Coordinated peers as an IA team lead by organizing office hours schedules, facilitating communication, and actively contributing to the design and enhancement of course content.

PROJECT EXPERIENCE:

- **Pick It Up! (2025):** I created a proof of concept demo for a 3D action multiplayer video game *Pick It Up!* (evmarcus.itch.io/pick-it-up) in 2 weeks, then directed a 10 person team over 9 weeks to produce a full version of the game, which we released on [Itch.io](https://itch.io), [IndieDB](https://indiedb.com), [GameJolt](https://gamejolt.com), and other sites. I hand-animated more than 3 minutes of [2D animated cutscenes](#) for the game, created original 3D animated characters in Blender, programmed gameplay code, and organized tasks to keep development progressing smoothly. Our game won the 2024 EECS 494 showcase, and has been downloaded over 300 times.
- **Custom Game Engine (2025):** I built a 2D game engine in C++ over several months for Windows, OSX, and Linux. I incorporated component architecture with scripting in Lua, SDL for rendering and input, built-in physics with Box2D, and a custom data-oriented particle system.
- **Asteroids in Javascript (2025):** I taught myself HTML, CSS, and JavaScript by recreating the game Asteroids in it. It was a fun exercise, and I learned a lot about managing a DOM.
- **OpenRCT2 (2023 – 2024):** I contributed features and bug fixes to the open-source video game OpenRCT2, participating in pass-around code review on a GitHub repository with hundreds of contributors.
- **Directed Films (2020 – 2024):** I did as many film production classes as I could squeeze in throughout college, which made it possible for me to direct two short films and two short animations, as well as assisting with the production of several other theater and film projects.

SKILLS:

Programming Languages: C++, C, C#, Python, HTML, CSS, JavaScript (Bootstrap, Vue.js included), Lua

Softwares: Unity, Blender, Jira, CMake, Visual Studio, Xcode, VS Code, GitHub, Excel, Google Suite, Microsoft Office, Adobe Suite (Premier, Photoshop, Illustrator, InDesign, Animate, After Effects)