Ryon Sajnovsky

rsajnovsky@yahoo.com | linkedin.com/in/ryon-sajnovsky | ryoncs.github.io | github.com/RyonCS

EDUCATION

Northeastern University — Boston, MA
Master of Computer Science, GPA: 3.97 / 4.0 — *Sep. 2022 – Aug. 2024*

California Western School of Law — San Diego, CA
J.D., Cum Laude, GPA: 3.41 / 4.0 — *Sep. 2019 – Dec. 2021*
- Passed MA 2022 Bar Exam: 316 / 270

TECHNICAL SKILLS

Programming Languages: Python, C++, Java, Swift, C, SQL, GLSL, HTML, CSS
Frameworks and Libraries: OpenGL, SDL, Qt, Bootstrap
Tools: Git, GitHub, Visual Studio Code, Xcode, MySQL, MongoDB
Skills: Data Structures and Algorithms, Object-Oriented Programming, 3D Graphics, Machine Learning, iOS App Dev

PROJECTS

Particle System with Optimizations | *Northeastern University* — *Jul. 2024 – Aug. 2024*
- Developed a particle simulator emitter utilizing C++, GLSL shaders, and OpenGL.
- Implemented instancing to reduce the number of draw calls sent to the GPU by 99.99%.
- Implemented the Gribb-Hartman method for frustum culling to reduce particles rendered by 30%.

Interactive Terrain Rendering | *Northeastern University* — *Jan. 2024 – Apr. 2024*
- Developed a real-time terrain rendering system using C++, GLSL shaders, and OpenGL.
- Implemented heightmap-based terrain generation with texture sampling to simulate realistic landscapes.

C++ Game Engine for Dynamic Maze Creation | *Northeastern University* — *Jan. 2024 – Apr. 2024*
- Utilized data-driven design principles to enable flexible scene loading and reusability.
- Developed a Python and a Tkinter-based GUI for intuitive maze creation and scene management.

Server-Based File Storage System | *Northeastern University* — *Sep. 2023 – Dec. 2023*
- Utilized C to develop a file storage system capable of transmitting and storing files.
- Utilized socket programming to send requests and files to the server and back to the client.
- Implemented mutexes to handle concurrent user requests, ensuring data integrity and preventing data corruption.

EXPERIENCE

Student Volunteer — Denver, CO
SIGGRAPH 2024 — *Jul. 2024 – Aug. 2024*
- Assisted attendees in the VR Theatre, guiding them through the setup and use of VR headsets.
- Networked with industry professionals and participated in educational sessions on advanced graphics techniques.

Summer Learning Program Mentee — Remote
The Academy Software Foundation — *Jun. 2024 – Aug. 2024*
- Completed courses in Python for Maya, Maya Basics, and Machine Learning, applying new skills to projects.

Lead Graduate Teaching Assistant — Boston, MA
Northeastern University — *May 2023 – Aug. 2024*
- Supported courses in Data Structures and Algorithms, Foundations of CS, and Object-Oriented Programming.
- Graded over 20 assignments weekly, providing detailed feedback to reinforce key programming concepts.
- Conducted weekly office hours, assisting over 50 students with debugging and clarifying concepts.

Attorney — Boston, MA
Northeast Legal Aid — *Jun. 2022 – Sep. 2022*
- Analyzed eviction cases, mediated disputes, and drafted legal documents to advocate for low-income tenants.