Robert Silverberg

Portfolio Site: https://rhs31.github.io

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rhs31@miami.edu | +1 (609) 480-2576 | Residence in Princeton, NJ, Coral Gables, FL, and St. Croix, US Virgin Islands

EDUCATION:

B.S. Computer Science | Expected Graduation: May 2020 | University of Miami | Coral Gables, FL
- Cumulative GPA: 3.485
- Recipient: UM Presidential Scholarship (Annual, scholastic-based)

Relevant On-Campus Coursework:
- <u>Computer Science:</u> Programming 1-3 | Game Programming | Virtual Worlds | Augmented Reality
  Artificial Intelligence | Systems Programming | Algorithm Analysis | Theory of Computing | Computer Architecture Digital
  Logic | Software Engineering
- <u>Mathematics & Physics:</u> Calculus I & II | Discrete Mathematics | Linear Algebra | University Physics I | Probability and Statistics

Online (Udemy) Courses Taken:
- **The Unity C# Survival Guide:** A course which discusses various C# programming techniques, in the context of Unity game development.
- **Complete C# Unity Developer 3D:** Comprehensive course where I learned how to create multiple 3D Unity projects with C# scripting (Realm Rush, Argon Assault, Project Boost).
- **Animation In Unity**: Learned about 3D animation (including humanoid rigs) in Unity.
- **C# Beginner – Advanced Courses:** Learned about the C# programming language.
- **The Web Developer Bootcamp:** Used HTML/CSS/Bootstrap, JavaScript, Node.js, and MongoDB to create real web applications (YelpCamp).

WORK EXPERIENCE:

Research Intern | USC Institute for Creative Technologies | Los Angeles, CA | Summer 2019
- Worked as an REU (Research Experiences for Undergraduates) intern in the Mixed Reality Lab, designing and building various spectator/camera techniques for collaboration in virtual reality (HTC Vive) with Unity and C#.

Unity Developer | Bogotá Digital Cinema | Miami, FL | Fall 2018
- Worked with a local studio to develop an interactive mixed-reality art exhibit called *Transplant* that is viewed through the Magic Leap One. It was shown at several art festivals.

Lead Instructor | iD Tech Camp | Lawrenceville, NJ | Summer 2017
- Taught the following courses to students of various ages and experience levels:
  Java Coding | Game Design & Development 101 (Maya + Unreal Engine) | Coding 101 (JavaScript)

LANGUAGES & SOFTWARE:

- **Proficient:** C#, Unity3D, HTML/CSS, 3DF Zephyr
- **Familiar:** C/C++, Java, JavaScript, Node.js, MongoDB, Blender, Autodesk Maya, Unreal Engine 4, Android Studio

SAMPLE PROJECTS:

Unity/C#:
- **Coral Guardin':** Programmed a mixed reality game for the Magic Leap One headset where the player protects coral from incoming pollution.
- **Track Builder:** Worked on a mixed reality game for the Magic Leap One headset at the Reality Virtually Hackathon at MIT. The player is able to build a virtual track that allows a ball to get to the finish line, while avoiding obstacles.
- **Sugar Crash:** Served as the lead programmer for the 2nd place winner at the MAGIC Game Jam at Miami-Dade College. A candy-themed 3D infinite runner where the player dodges obstacles.
- **Tetris-Platformer Hybrid:** A 2D game which combines Tetris with a platformer.

Web Development:
- **YelpCamp:** A Bootstrap website that uses Node.js and MongoDB to log information about different campsites.

C++:
- **MapQuest Clone:** A program which uses an implementation of Dijkstra's Algorithm with data files containing all major roads and towns in the US, to output the shortest path between any two user-inputted US towns, and then draws the path on a map.