

Rensselaer Polytechnic Institute, Troy, NY ❖ August 2014 — December 2019

Dual Major: Computer Science ❖ Games and Simulation Arts and Sciences

Remote Contract Game Programmer: *Hearing.Games LLC*, Menlo Park, CA

February 2020 — present

- ❖ Updating the UI, layout, and gameflow in the Unity *Kids Hearing Game* interactive hearing test for iOS and Android, including a new exportable results page, better menu organization, the ability to cancel out of rounds, a new self-playing demo mode, and embedded help/info webview popups.
- ❖ Integrating accounts, analytics, and cloud saves to the previously purely-offline game.
- ❖ Designing and planning these changes with the rest of the team.

Software Engineering Co-op: *Vicarious Visions / Activision*, Albany, NY

May 2019 — December 2019

- ❖ Designing, developing, and extending a data-driven UI framework for a currently unannounced game in C++ with an agile UI team.
- ❖ Building and programming the user interface of the game using this framework and the tools produced by our team.
- ❖ Meeting regularly with artists and designers as the UI design developed to provide feedback and determine their needs.
- ❖ Doing solo work on complex systems within the UI, such as the mapping system in a procedural game world. Interfacing with multiple departments to determine the best design and technical approach. Writing up comprehensive documentation of the systems for future developers. Continuing support of the systems as design evolved.

Interactive Design and Programming Intern: *IBM*, Yorktown Heights, NY

May 2018 — August 2018

- ❖ Optimizing and developing an interactive program built with Unity and C# that displays the data collected and generated by the Jefferson Project in a 3D real-time environment.
- ❖ Working with other members of the Jefferson Project research team to determine their requirements for the data viewer and the resources and data needed to achieve them.

Game Designer and Programmer: *Outreach of the Jefferson Project at Lake George*

September 2017 — May 2018

- ❖ Porting the educational Unity desktop game *World of Plankton* to tablet and touch controls.
- ❖ Optimizations for intuitive control, ease of use, and player enjoyment.
- ❖ Continued design work and development to convert the original single-player first-person game into an experience suitable for a museum installation.

Coined the name of the Minecraft element “*Prismarine*” ❖ May 2014

Major Experience: C++, C, JavaScript, Python, C#, HTML5, CSS, Unity, Java, 3D math and logic

Minor Experience: Shader code, SQL, Haxe, z/OS, Assembly