Michael Barba

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An engineer looking to make great games with great people.

Experience

Blizzard Entertainment
Software Engineer Co-Op · Albany, NY   *Jan 2021 - Aug 2021*
- Working on the Gameplay/UI team of **Diablo 2 Resurrected** on a wide variety of tasks.
- Work with existing UI **metadata system** to create new UI features and iterate on existing UI.
- Own crucial localization features such as IME support with the **Windows API** for Korean, Japanese, and Chinese.
- Maintain the audio system, and support **console** team with development of the **Nintendo Switch** port.
- Close off the game strong working on polish and bug fixes in a variety of areas, mainly **UI**, **gameplay**, and **audio**.
- Work closely with artists and producers on our team to quickly implement features, like a new notification system, controller navigation, and accessibility options.
- Quickly familiarize myself with **custom C++ engine** and tools to iterate on many areas of the codebase.

Buh! Gaming
Software Engineer · Kirkland, WA   *May 2019 - Aug 2020*
- Developed many systems in **Unity (C#)** for the upcoming **third-person MOBA** Tournament of Tamers.
- Presented at the **Seattle Indies Expo** after being selected by their judge panel.
- Built an **analytics** system to easily observe player trends and balance characters.
- Worked on **gameplay** (new characters abilities), **UI**, minion **AI**, Steamworks API integration, **networking**.

Education

BS in Computer Science, University of Massachusetts Amherst   3.88 GPA
    BS in Applied Mathematics, Secondary Major

Coursework Taken: Data structures, algorithms, computer systems, operating systems, scientific computing, stats, intro to unix, linear algebra, calculus, intro to computation (discrete math), graph theory & combinatorics

I have completed three years of coursework. After completing my co-op at Blizzard, I will be graduating May 2022

Personal Projects

ANTIGOLF
2D golfing puzzle game made in Unity   mbarba.com/project/antigolf
- **1 of 10 winners** from the Brackey's 2020.1 Game Jam with **over 700 entries.**
- Among **top 5** in categories such as "fun" and "innovation".
- Launched on itch.io with over **1,500 players.**

HUEb
First-person puzzle game inspired by Portal and Antichamber   mbarba.com/project/hueb
- **2nd place winner** of Weekly Game Jam 160 with **over 80 entries.**
- Created **custom shaders** (**HLSL**) to improve the game visually and utilize **Unity Animation/Particle System**.

Understanding Quaternions
Educational math demo made in Unreal Engine 4   mbarba.com/project/quaternion
- Intended to teach indie developers about quaternions, a vital math object used for rotations.
- Built UI manager in **C++** called by **Blueprints** in order to quickly iterate on **UMG** UI and gameplay.

Skills

- **Programming Languages:** C++, C#, Java, JavaScript
- **Development:** UI/UX, Gameplay, Console (NintendoSDK), Windows, Audio (FMOD), Performance/Profiling, Custom Engines, Metadata Systems, Unity, Unreal Engine 4 (C++ & Blueprints, UMG), Git, SVN, JIRA
- **Others:** 3D Math, Steamworks API, Photon Networking API, Windows API, Photoshop, Blender, LaTeX