# **Benjamin Code**

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## Qualification Highlights

- Masters degree in computer science with a focus on real time systems & software development
- Professional experience in sales, marketing, operations, and creative roles
- Excellent problem solving skills in both technical and business domains
- Proven track record of exceeding expectations under strict timelines and extreme pressure

\_\_\_\_\_ Education \_\_\_\_\_ **Master of Science in Computer Science Concentration: Real Time Systems & Software Development GPA: 3.76/4.00** (Magna Cum Laude) **Bachelor of Arts in Communication GPA: 3.5/4.00** (Cum Laude)

> Relevant Development Projects (Additional information and demos can be found on my website, listed above)

- Game Engine Development [C++, DirectX 11]
  - Developed custom Memory, Math, File, Object, and Graphics (including model instancing, lighting, cameras, etc.) systems in DirectX 11 using C++ to create a real-time game engine
- Game Performance Optimization [C++]
  - Reworked and enhanced data structures, math libraries and memory systems to optimize them for real-time performance
- Multithreaded Audio Engines [C++]
  - Created two distinct audio engines using the XAudio2 API and the WIN32 API respectively. Both engines have the ability to create and playback complex playlists with active sound parameter controls (panning, volume, time controls, pitch, etc.) via multiple threads
- Modern Architecture Space Invaders Remake [C#]
  - Recreated the classic arcade game Space Invaders using 13 object oriented design patterns and 140+ classes
- MS Paint Clone [Java]
  - Created a simple paint app with basic mouse and keyboard input reading, color/shape/brush selection options, fill options, etc.
- Distributed Blockchain System [Java]
  - Created a secure, SHA-256 hashed, proof-of-work blockchain distributed over a number of servers
  - Implemented a peer-to-peer, multicast and broadcast distribution system for sharing the blockchain ledger
- Personal Website [JavaScript, HTML/CSS]
  - Learned React in order to create a custom portfolio website to display my other projects

#### Professional Experience

- Account Executive, DoorDash (Trigger Group), 2020-2021
- NBCUniversal Conglomerate, 2017-2020
  - Project Coordinator, Peacock (NBCUniversal Digital Enterprises), 2019-2020
  - Project Coordinator, Snapchat (NBCU x Snap inc. Joint Venture), 2018 2019
  - Page, NBCUniversal Page Program, 2017 2018

#### Technical Summary

- Programming Languages: C++, C, C#, HLSL, Java, Python, JavaScript, SQL, HTML/CSS
- Frameworks and Libraries: DirectX, XAudio2, Windows API, Google Protocol Buffers, React
- Version Control: Perforce, Git

### Relevant Soft Skills

- Clear and effective communication, both written and verbal
- Comfortable in fast paced, high-stakes roles where critical thinking is necessary
- Understanding of business and interdepartmental needs
- Comfortable in a group setting with strong public speaking skills
- Strong active listening skills with the ability to correctly and easily parse information and instructions