

# Ryan Jacob Pfeifer

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## ➤ EDUCATION

- **B.S. Computer Science Texas A&M University** May 2020
  - GPA: 3.96
  - Minors: Game Design and Development, Cybersecurity
  - *Related Coursework:*

Level Design	Artificial Intelligence
Game Design	Computer Graphics
Game Development	Operating Systems

## ➤ WORK EXPERIENCE

- **Gameplay Engineer at ArtCraft Entertainment** June 2020 - Present
  - ❖ Unannounced Project (August 2021 - Present)
    - Utilized Unreal Engine 4 tools and technologies to create a prototype multiplayer project
    - Collaborated with design to fine-tune and implement game systems from game design documents
    - Architected and implemented core gameplay features including AI, UI, and combat systems
  - ❖ *Crowfall* (June 2020 - August 2021)
    - Built new gameplay features and debugged existing ones on a live-service MMORPG using Unity
    - Assisted in onboarding new hires and transferring game system ownership
    - Helped establish a network payload contract between the client and various microservices
    - Promoted from associate to mid-level Gameplay Engineer after one year
- **Software Engineering Intern at Synchrogrid** May 2019 - August 2019
  - Worked at a startup company on the back-end of a smart grid Node.js application in C++
  - Learned and utilized an industry-specific scripting language (CUPL) to automate calculations for power lines
  - Made and published a Visual Studio Code syntax highlighter for CUPL which has been installed over 360 times
  - Built an automated testing framework for the back-end of an application using Jest and the SheetJS API

## ➤ PROJECTS

- **Chillennium 48 Hour Game Development Competition (1<sup>st</sup> Place Overall Winner)** Fall 2019
  - Competed in a team of 4 to develop a video game in 48 hours using Unity and C#
  - Rapidly prototyped, designed, and implemented gameplay mechanics and AI behavior
  - Won 1<sup>st</sup> Place Overall out of over 90 games judged with around 400 participants
- **Game Development Project - Frog and Croc Team Leader** Fall 2019
  - Led an interdisciplinary team in developing a semester-long video game project using Unity and C#
  - Designed and implemented gameplay mechanics, programmed player movement, and designed levels
  - Highly praised by a panel of professional game developers
- **Interactive Virtual Environments Project - Reflector VR** Spring 2019
  - Developed a VR game with a team of artists and programmers using Unity, C#, and HTC Vive hardware
  - Utilized the SteamVR library to implement gameplay mechanics, program AI behavior, and design levels
  - Demoed the game live at the Vizagogo Visualization Showcase where attendees played the game
- **Personal Project - Summon the Spell Book** Summer 2019
  - Collaborated with a small team to draft and iterate on a game design document
  - Prototyped and iterated on gameplay mechanics, programmed AI behavior, and designed levels using Unity
- **Senior Capstone Design Project - Lord of the Strings Team Leader** Spring 2020
  - Leader of a team of programmers tasked with creating a semester-long web application project
  - Implemented front-end systems using HTML, CSS, and JavaScript with the anime.js animation library
- **Volunteering - Coding Lessons for 5<sup>th</sup> Grade Students** Fall 2016 - Spring 2019
  - Organized and prepared slideshows and code samples for the *Hour of Code* using Google Slides and repl.it
  - Taught lessons covering various programming concepts such as AI, cryptography, and binary numbers
- **Personal Project - Music Visualizer** Summer 2018
  - Created a webpage to visualize the waveform of any given .mp3 file
  - Used HTML, CSS, and JavaScript with the Web Audio API to display dynamic graphics

## ➤ SKILLS

- **Programming Languages**
  - C++, C#, Java, JavaScript, HTML, CSS, Python, x86 Assembly
- **Software**
  - Unity, Unreal Engine 4, Unreal Blueprints, Git, Perforce, OpenGL, GLSL, Node.js