

Work Experience

Software Engineer, Senior

Hi-Rez Studios

May 2017 - Current

Rogue Company

- Developed a modular game mode system to enable designers to rapidly prototype game modes using Blueprint.
- Refactored game systems for long-term support and to allow for experimental reuse of systems for prototyping.
- Implemented multiple character abilities and weapons by building and improving upon existing gameplay systems.
- Improved character movement mechanics to perform over the network by reducing client/server disagreements.
- Spearheaded design and development of 'Battle Zone' the highest ever CCU limited time mode in Rogue Co.
- Built configurable spawn point selection decision tree system for respawn and objective based modes.
- Integrated and maintained Vivox voice chat by developing upon the Hi-Rez UE4 voice chat plugin.
- Prototyped killcam by utilizing network data to replay gamestate to the player in a parallel world.
- Redesigned user settings system and recreated UI to decouple logic and allow for cross-play saving.
- Monitored build status and fixed high-severity bugs quickly in order to resolve playtest-blocking issues.
- Leveraged knowledge in Unreal Engine 4, C++, and Blueprint to support designers and technical artists.

Realm Royale

- Prototyped gameplay features during a high-paced iteration cycle after Realm's sudden unexpected success.
- Leveraged ability to pick up new technologies quickly to help where needed in Unreal Engine 3 and Unreal Script.

Hand of the Gods: SMITE Tactics

- Created Blueprint library to allow designers to create and maintain character abilities and spells autonomously.
- Added gameplay event logging system by linking gameplay events to generate meaningful data for display.
- Designed configurable player deck validator for general and limited time event games to prevent cheating.
- Leveraged knowledge in Unreal Engine 4, C++, and Blueprint to create tools for designers.

Software Engineer, Intern

2K

Summer 2016

Mafia III - Tools

- Developed a scriptable soak testing system in Lua to collect data and analyze game performance.
- Authored ImageMagick plugin for the art pipeline to convert to and from DDS image file format.
- Leveraged knowledge in C++ and Lua to support quality assurance and technical art teams.

Education

Los Angeles, CA

University of Southern California

Spring 2013 - Spring 2017

M.S. Computer Science, May 2017.

Coursework: Mobile Games; Networked Games; Analysis of Algorithms; Database Systems; Web Technologies

B.S. Computer Science (Games), May 2016. GPA: 3.76

Coursework: Computer Graphics; Computer Networking; Game Engine Programming; Linear Algebra; Operating Systems; Data Structures; Algorithms; Discrete Mathematics; 3D Animation; Game Design

Lead Teaching Assistant for CS201 - Principles of Software Development, Summer 2014 - Spring 2016

Languages and Technologies

Proficient: C++; Unreal Engine 4

Familiar: Java; Lua; C#; Unity; Javascript; Swift; Python

Visual Studio; Perforce; Git; JIRA; Backtrace

Projects

Information about my student and personal projects can be found at my portfolio website: www.MattCarey.com