Will Hagen

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Education

Carnegie Mellon University, Entertainment Technology Center (ETC), May 2016 Master of Entertainment Technology (MET)

Rochester Institute of Technology, 2011 - 2014

Game Design & Development (BS) Minors: Entrepreneurship, Business Administration

Skills

Programming: C++, C#, Javascript, Matlab, HTML5, Jade, Angularjs, Python, Java (familiar)

Professional Tools: Visual Studio, Unity, Linux, Git, SVN, Adobe Photoshop CS5/6, Adobe Flash CS6, Maya, Hammer

Selected Personal Projects

Van Dyke: C++ Chess engine and AI, built by myself over a 2 month period (11/13 - 01-14).

- Implemented AI utilized AlphaBeta / Negamax search.
- Created a Position Evaluation algorithm.
- Programmed the basic rules of Chess.

The Disposables, Episode 1: Windows 8 app made by a team of 4 for Imagine Cup 2013 in C#/Mono Game.

- Implemented a State Machine which controlled the game's behaviours.
- Balanced the game, including runnning user tests, and iterating based on data.
- Implemented auxillary gameplay features, to support the user's interaction.

Selected Academic Projects

Blowout!: An experience for the Xbox Kinect using Unity over 2 weeks by a team of 5 (9/14).

- Designed and implemented unique AI behaviours, primarily using Flow Fields.
- Created and balanced a custom final boss encounter.
- Took responsibility for the cohesion of the design, and maintained the Game Design Document.
- Alpha: A 3D "Wolf Simulation," built from the ground up in C++ and DirectX11, with a team of 5 (01/14 5/14).
 - Designed an open world AI, simulating woodland critters interacting with a single wolf.
 - Implemented gameplay features such handling the primary player character's mechanics.
 - Created a suite of behaviors used to simulate prey of the wolf, including wander, flee, and idle behaviors.

Experience

AAOA Healthcare, IT Intern, May 2014 – August 2014: Designed software based on specifications given by the Management Team. Also implemented those designs to create production code, including client facing, and internal support software.

Interactive Media Guild, Founder / External Relations, April 2013 - May 2014: IMG is an organization founded to represent all students who were interested in Interactive Media Applications, such as Games, Websites, or other software Apps. My role was to represent the group to company representatives, as well as Rochester Institute of Technology.

RIT, Teaching Assistant, September 2012 – 2014: Assisted professor by teaching, grading, and helping students outside of class. Primarily assisted the advanced section the introductory sequence, as well as our Data Structures and Algorithms course.

ID Tech Camps, Instructor, June 2013 – August 2013: Instructed campers between the ages of 10 and 17 in topics including 3D Level Design in Team Fortress 2 / Portal 2, 3D Modeling in Maya, and 3D Level Design with Minecraft. Each class contained eight campers, who's instruction was evaluated based on their final projects.

Activities & Honors

Golisano Dean's Student Advisory Board, Member – 2012 - 2014 Matchbox Productions, Founder, Producer, Sound Design / Op, Writer, Actor – 2009 - 2011