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Sean Halloran

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OBJECTIVE: Software engineering full time position in developing Virtual Reality Games/Applications

EDUCATION:
Worcester Polytechnic Institute (WPI), Worcester, MA, May 2016
Bachelor of Science, **Double Major in Computer Science & Interactive Media and Game Design**, GPA: 3.65/4.0

EXPERIENCE:
Software Engineering & Game Design, Intern, Myomo, Cambridge, MA, May 2014 – Present
- Designed and programmed several video games in C# for training users of powered orthotic devices
- Programmed and designed port of Soda Drinker Pro for myoelectric controlled orthotic brace
- Programmed in C++ and C# a Unity3D plugin to interface powered orthotic devices with Unity3D game engine
- Evaluated video game prototypes controlled with powered orthotics with patients at Spaulding Rehab Hospital

Programming & Electrical Engineering, Intern for three summers, Applied Materials, Gloucester, MA, 2011-2013
- Created a tool in C# for wiring physical and logical interfaces inside ion implantation machines, gathered employee input to create features most useful to the company, presented features, and refined designs
- Programmed in C for microcontrollers to create debugging software for analog/digital IO boards

SKILLS:
Programming Languages: C#, C++, Java, Python, JavaScript, Lua
Software: Unity3D, Oculus SDK, Unreal Engine 4, Visual Studio, Eclipse, Git, Linux
Hardware: GearVR, Oculus Rift, Leap Motion, Raspberry Pi, Arduino, soldering, oscilloscope

PROJECTS:
Virtual Reality Android GearVR and Windows Oculus Rift Game Intern Astronaut, October 2015 – Present
- Solely programmed in C# crossplatform VR game in Unity working with small team of artists
- Optimized CPU and GPU performance for both Windows and Android GearVR
- Designed and implemented VR 3D UI for multiple input devices across Windows and Android

Virtual Reality Grapple Based Traversal Game with Osaka University, July 2015 – October 2015
- Designed and programmed in C# a novel grapple based traversal system for seated virtual reality experiences
- Designed and programmed in C# a heads up display and UI for virtual reality in Unity3D game engine
- Managed four programmers and an artist collaborating with Osaka University Takemura Lab on Oculus Rift game

Myomo Backgammon, September 2014 – March 2015
- Designed and implemented virtual backgammon in Unity3D for training users of myoelectric controlled orthotics
- Programmed backgammon model and AI in C#
- Ran user testing on group of users of orthotics and collected feedback to improve game

Planning Poker Module for WPI Suite, March 2014 – May 2014
- Led fourteen student software engineer team to create a digital planning poker game from assigned requirements
- Designed and implemented user interface for Java Swing application
- Awarded best product in competition against seven other teams

Chair Simulator, Video Game and Custom Motion Controller, October 2013 – December 2013
- Developed a video game in Unity3D on a team of two students
- Prototyped a custom motion controller to enable users to play this game with an office chair

AWARDS AND ACHIEVEMENTS:
Grand Prize Winner MassDigi Game Challenge, February 2016
Runner-up at Woo! Game Pile: Lightning Pitch Contest, October 2015
WPI Outstanding Junior in Interactive Media and Game Design, May 2015
PAX East Omegathon Champion, March 2015
Eagle Scout, Boy Scouts of America, September 2011

ACTIVITIES:
President, Game Development Club, WPI, September 2012 - 2015
Mentor, First Robotics Team 2084, 2012-present
Volunteer, Trustees of Reservations, 2009-present