Tyler Thompson, Gameplay Software Engineer
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Shipped Games

Maxis Studios: The Sims 4 Horse Ranch
Trigger XR: Jurassic World Dino Tracker AR

Professional Experience

Electronic Arts, Maxis Studios, Gameplay Software Engineer, June 2022 – Present

- Coordinate across engineering, design, and art disciplines to gather requirements and formulate implementation plans in a TDD
- Act on implementation plans using Python, ActionScript, and C++ to complete pack features within provided estimates
- Debug issues for both new pack features and known legacy bugs in order to fix bugs quickly
- Participate in TDD and code reviews, both giving and receiving feedback, to ensure that the overall code quality remains high

Trigger XR, Software Engineer, July 2021 – June 2022

- Worked with programmers and designers to develop XR apps for Trigger clients, including Verizon and Universal Pictures
- Developed primarily Android and iOS augmented reality applications using C# and Unity
- Participated in Agile training courses from Scrum Alliance and received Certified Scrum Developer certification
- Utilized Jira for task tracking and to ensure alignment of project priorities

Electronic Arts, Maxis Mobile Quality Engineering, Intern Software Engineer, May 2020 – August 2020

- Worked with teams developing Battlefield Mobile for the EA studio Industrial Toys
- Researched behavior-driven development (BDD) and made assessments to the ROI of various BDD tools
- Communicated with primary stakeholder, Industrial Toys QA team, to gather requirements related to BDD research and tools
- Presented, documented, and developed tests using BDD tools while giving suggestions as to the use-cases of each option

Skills

Coding Languages: C++, C#, Python, ActionScript, Java
Applications: Unreal Engine, Unity, Visual Studio, JetBrains PyCharm, JetBrains Rider, Perforce, Git
Platforms: Windows PC, MacOS, PlayStation, Xbox, Android, iOS, HTC Vive, Oculus Rift

Education

Carnegie Mellon University, Entertainment Technology Center (ETC), Pittsburgh, PA
Master of Entertainment Technology — May 2021
University of Pittsburgh, Pittsburgh, PA
B.S. in Computer Engineering — April 2019

Academic Projects

ETC Project: Team HotSpot, Programmer, ETC, Fall 2020

- Developed an in-person game experience using Boston Dynamics' Spot robot with an interdisciplinary team of six
- Programmed using Python to control Spot, Arduino's C/C++ dialect to control other physical aspects of the experience such as feedback LEDs that were attached to Spot, and C# with Unity on a PC to communicate between Spot and the Arduinos
- Collaborated with designers to create prototypes which could be playtested and iterated upon until playtest results were positive and client requirements were met

Computer Game Programming, Programmer, Carnegie Mellon University, Fall 2020

- Developed seven one-week games individually and one six-week game on a team of four using C++ and provided base code
- Learned how to use C++ without a game engine for 2D and 3D game development, including graphics and sound
- Worked with a team of four programmers coding, writing, and designing a six-week final C++ game project

ETC Project: Game Pre-Production, Programmer, ETC, Spring 2020

- Worked with an interdisciplinary team of six on pre-production to prove new game mechanics in a turn-based strategy game
- Utilized algorithms typical in game programming for the purposes of pathfinding and other key gameplay features
- Prototyped and playtested new key mechanics in C# using Unity based off communications with system designers
- Documented project and wrote code with an emphasis on readability that could be passed off to another team next semester

Building Virtual Worlds, Programmer, ETC, Fall 2019

- Developed VR games using the HTC Vive and Oculus Rift, including a 4v1 competitive game, What Lies in the Dark
- Playtested games with a variety of age groups to ensure games were entertaining, intuitive, and comfortable in VR
- Programmed five rapid prototypes in one to three weeks per prototype on teams of five
- Doubled as programmer and producer on each project, managing team meetings, progress, and expectations

Europa, Lead Physics Programmer, University of Pittsburgh, Fall 2018

- Programmed a three month long student-driven project on a team of ten
- Directed implementation of the physics module and integrated it with the AI and procedural generation modules
- Utilized C++ to build the game from the ground up without a game engine