

Thomas Roy - Resume

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Skills / Qualifications

Coding Languages: C / C++, C#, Lua

Math: Advanced 3D Math, Matrices, and Geometry

Program Knowledge: Visual Studio, Xcode, Unity, TT Fusion, Perforce, Jira

Experience With: PC, Nintendo 3DS, Playstation Vita, iOS, Android, OpenGL, DirectX, Unreal Engine, Photoshop, Maya, Agile, Scrum, and OOD development.

Leadership: I have been a teacher, teacher assistant, tutor, and mentor at the Art Institute of Vancouver. As a producer, I led a team of over 20 other students during a nine month Unity game project, entitled *Resonance*.

Additional Skills: Exceptional problem solver, creative thinker, and excellent oral and written communicator.

Work Experience

Software Engineer – SkyBox Labs - September, 2016 – Present

Work in Progress: Unannounced triple-A title

Prominent Experiences

- Worked back and forth between C++, C#, and Lua to develop new gameplay experiences for players in an online networked environment.
- Created numerous Lua scripts and bindings to marshal data to and from the C++ engine.
- Worked within, maintained, and improved upon a codebase over 20 years old.
- Liaised between game designers and tech leads to plan, create, and deliver on new requested features within strict timeframes.

Gameplay Programmer - Hellbent Games - January, 2014 – April, 2016

Shipped Titles: *LEGO® Ninjago™: Nindroids™*, *LEGO® Friends iOS*, *LEGO® Ninjago™: Tournament of the Elements™*, *Wick*

Prominent Experiences

- Coded new and expanded upon existing gameplay features and systems for a number of platforms from PC, to handheld, to mobile.
- Designed and implemented many new gameplay mechanics, events, scenarios, and boss encounters.
- Created gameplay tools and implemented entire user interfaces from scratch.
- Worked extensively with the 3Cs of gameplay, created an evolving arena spawning system, and constructed a dynamically tracking, panning, and zooming battle camera.
- Developed an isometric hexagonal map event movement system and a naval cannon projectile system.

- Optimized scenes for performance, executed rapid prototyping, and integrated many animations, sounds and effects.
- Consistently immersed in collaborative and dynamic team game projects with all stakeholders across game development.

Awards

Best of Show - Visual and Game Programming - Art Institute of Vancouver Portfolio Show – September 24th 2013

Education

Bachelors of Science in Game Programming - Art Institute of Vancouver – June 2017

Visual and Game Programming Diploma - Art Institute of Vancouver – September 2013

Prominent Experiences

- Extensively programmed in C / C++, and C# in a variety of fields and projects.
- Organized and led a three month Unity VR game designed for the HTC Vive.
- Designed, implemented, and optimized an A* path-finding algorithm for dynamically changing collision shapes.
- Created a graphics pipeline from scratch, culminating in a rotating 3D cube.
- Programmed a visual heat map propagation system for use in Unity.
- Formulated an image detection program to analyze body positioning.
- Optimized a 3D C++ DirectX rendering engine by dividing a terrain mesh into sections, creating a frustum class, and culling these sections from it.
- Devised a 2D collision detection system between circles, axis aligned bounding boxes, oriented bounding boxes, and triangles.

Game Art and Design - Art Institute of Vancouver - July 2011 – September 2011

- Studied and acquired game design theory
- Intermediate Maya 3D creation and Adobe Photoshop skills

Intensive Ballet Training Program - Pacific Dance Arts – 2011

- Honed and developed Classical Ballet and Pas De Deux skills
- Acquired precision, self-discipline, strength, and conditioning

Hobbies / Interests

I am an avid video gamer; I look to games, not just as a means of relaxation and leisure, but as a form of study and self-reflection. I am fascinated by the evolution of gaming's industry and culture. I always seek to expand my knowledge base and I am actively enhancing my current skills and technical prowess.

I am a huge proponent of health and exercise. I love to run and I love to dance. My favourite dance styles are that of Break-Dance, Hip-Hop, and Contemporary. I also enjoy writing scripts and creating vivid, imaginative worlds to explore.

Philosophy: I believe that to be an excellent programmer one needs not only a deep and thorough understanding of the coding language chosen, but one also requires an invested interest and passion in the design of the application itself.