

# MONIQUE ORY

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## EDUCATION **DIGIPEN INSTITUTE OF TECHNOLOGY**, Redmond, WA

*MASTER'S OF SCIENCE IN COMPUTER SCIENCE*

Coursework completed: July 2009, Thesis incomplete – GPA 3.56

## **LOUISIANA STATE UNIVERSITY**, Baton Rouge, LA

*BACHELOR'S OF SCIENCE IN COMPUTER SCIENCE*

Graduated: December 2004 – GPA 3.74

## SKILLS

- **Programming** : C++, C, C#. Some Java
- **Programming Environments** : Visual Studio, Microsoft XNA, Eclipse
- **Scripting**: UnrealScript, ActionScript 3.0, XML
- **APIs**: Windows API, .NET, DirectX 9, OpenGL
- **Game Engines**: Unreal Developer Kit, Unity 3
- **3D Math**: Linear algebra, curves and surfaces; vector, matrix, and quaternion operations.
- **Graphics** : 3D and 2D engines with DirectX. Shader programming with HLSL. Ray tracing. Projects covering various graphics and rendering topics, including texturing, lighting, occlusion.
- **Animation** : Key framed animation of skeletal rigs, inverse kinematics
- **Physics** : Bounding box collision detection/response, particle physics, spring-mass system for cloth simulation.
- **Artificial Intelligence** : Finite State Machines, path finding using A\* and Dijkstra, genetic algorithms, melee combat AI for the game TEK
- **Tools**: Developed sprite sheet editor using Unity editor GUI. Developed level editor for 2D platformer (C# with XNA).
- **General Computer Science** : Algorithm analysis and design, software engineering, database management systems, computer organization, operating systems design.
- **Software** : 3D Studio Max, Flash, TortoiseSVN version control, Doxygen, Excel, Word, PowerPoint
- **Communication** : Written analysis of algorithms and operating system performance. Written software requirements, game design documentation, and technical design documentation. Helped coworkers with basic computer issues and software questions. Trained new and existing employees with software and work procedures.

## GAME PROJECTS

- 2008 - 2009      **TEK** (DigiPen) - 3D single player sword fighting game (C++)  
*Product manager. Artificial intelligence programmer. Import of art assets.*
- Spring 2008      **Drones** (DigiPen) - 3D puzzle game (C++)  
*Producer. Physics programmer. Event trigger system. XML serialization.*

## EMPLOYMENT

- June 2011 – August 2011      **INTERNALDRIVE TECH CAMPS – UC IRVINE**, Irvine, CA  
*Instructor: Programming with C++/Java, RPG Game Design with Neverwinter Nights 2, FPS Game Design with Unreal Developer Kit*  
Teaching kids and teens from 12-17 fundamentals of programming and game design.
- November 2010 – March 2011      **COLLABERA AT MICROSOFT**, Redmond, WA  
March 2010 – September 2011      **VOLT AT MICROSOFT**, Redmond, WA  
*Software Test Engineer 2 (contract) – Zune Marketplace / Windows Entertainment Client*  
Tasks included: Running and writing manual test cases, opening/tracking bugs, daily build verification and service integration tests