

# Tony McCall

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Phone: (806) 470-1547

Web Portfolio: <http://www.tonymccall.org>

Experienced programmer exposed to computer science at a young age, passionate about the entire process of software development and a quick learner constantly seeking out new areas to explore. Have diverse and demonstrable experience in game and general application development. Willing to relocate.

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## Specialized Skills

*Microsoft Visual Studio	*Relational Databases	*Network Socket Programming
*Microsoft Office (entire suite)	*Excellent C, C++	*Windows, Linux, Android
*3D transformations	*MFC, Platform SDK	*Maya, 3D Studio Max, Blender
*Excellent C# .NET	*OpenGL, DirectX	*Java, Eclipse, NetBeans

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## EDUCATION:

DeVry University  
Bachelor Degree in Game and Simulation Programming 2009  
Achieved an A in every class taken, 4.0 GPA, Summa Cum Laude

Odessa College - Odessa, Texas  
Associate Degree in General Studies 2005

## WORK EXPERIENCE:

Raw Thrills 4/2011 - Present  
Game Programmer Skokie, IL

- Credited work on published titles, Jurassic Park and SnoCross. Experience in the entire life cycle of a project.
- Close work with artist including game design, implementing ideas, developing gameplay, optimizing workflow, troubleshooting, debugging, art pipeline modification, iterative content enhancement and general teamwork.
- Prototyping new games, reference utilization, project management, player observation, evaluation and feedback.
- Work with world class tools like Maya, 3D Studio Max, Photoshop. Audio programming and use of audacity.
- Utilization and extension of several game engines. Windows/DirectX, Linux/OpenGL, Android/OpenGL ES.
- Work in complex multiplatform build environments using lots of internal and external libraries.
- Source versioning utilization, configuration and management. Technical writing and documentation.

Texas Tech University Health Sciences Center at Lubbock 11/2001 - 4/2011  
Preston Smith Library - Senior Specialist Lubbock, TX

- Strong background in IT, hardware upgrades, network security, technical support, purchasing and consulting.
- Developed custom IT tools for remote computer management, statistical gathering and information processing.

## PROJECT EXPERIENCE:

Independently always have several active projects and topic areas under exploration.

- Deferred shading techniques with OpenGL, GLSL, MRTs, FBOs. Light volumes and the stencil buffer.
- Cascading shadow maps with view frustum cropping, light view culling, polygon offsets and PCF sampling.
- Particle system, robust slider based tool, post fx glow shader, server-side multi-buffering, primitive instancing.
- Real-time constrained rigid body physics, velocity impulse and LCP techniques. RK4 integration and springs.
- Collision detection, ray casting, hierarchical bounding volumes, convex polyhedron GJK, EPA, contact manifolds.
- Game engine architecture, keyed animation, art workflow, export pipeline, intuitive GUI development.