

Marc A. Soriano

- Education:** Masters of Science, Computer Science Summer 2009
Focus in Computer Graphics and Simulations
Bachelor of Science, Computer Science March 2006
Focus in Computer Graphics and Artificial Intelligence
Bachelor of Science, Mathematics March 2006
Focus in Computational Mathematics
University of California, Riverside
- Publications/Conferences:** Zordan, V.B., Macchietto, A., Medina J., Soriano, M., Wu, C.C., Interactive Dynamic Response for Games, ACM SIGGRAPH Sandbox Symposium, 2007.
- Zordan, V.B., Macchietto, A., Medina, J., Soriano, M., Wu, C.C., Metoyer, R., Rose, R., Anticipation from Example, ACM Virtual Reality Software and Technology (VRST) 2007.
- Metoyer, R., Zordan, V.B., Hermens, B., Wu, C., Soriano, M., Anticipating Impacts, ACM SIGGRAPH Technical Sketch, 2006.
- Experience:** **Graduate Student Researcher** Fall 2006 to present
University of California, Riverside
Riverside Graphics Lab, Advisor Victor Zordan
- Research in human motion through physical simulation and motion capture.
 - Applied these methods to more automated character animation and physics-based motion capture cleaning. (see publications)
 - Current work includes creating a more immersive, realtime, and physically based interactive motion capture experience for use in video games and entertainment.
- Lab Instructor for Game Development and Design** Winter 2009
University of California, Riverside
CS134 Under Victor Zordan
- Teaching undergraduate students the tools needed to create their own 3D game
 - Character modeling, texturing, rigging and animation using Blender
 - Gameplay mechanics, lighting, collision detection and level design using Ogre3D and Bullet
- Part-time Instructor in Computer Information Systems** Summer 2007 to 2009
Riverside Community College
Instruction in Computer Information Systems, focusing mostly on word processing, C++ programming, and basic use of Photoshop, Microsoft Office.
- Undergraduate Student Researcher** Summer 2003 to 2006
University of California, Riverside
Riverside Graphics Lab, Advisor Victor Zordan
- Research on a distributed graphics network Gnutella as the peer-to-peer medium.
 - Physically based real time interactive simulation over a network connection
 - Combining motion capture data with physics based simulations and reactions.
- Undergraduate Senior Design in Robotics** Fall 2005
University of California, Riverside
Advisor Christian Shelton
- Worked in a team to understand and use the ActivMedia Pioneer 3-DX wheeled robot.
 - Developed a robot navigation system for path planning, localization and path traversal of the robot.

Undergraduate Student Researcher

Summer 2004

University of California, Los Angeles

Magix Graphics Lab, Advisor Petros Faloutsos

- Research on realistic facial animation using a test-to-speech animator and fundamental linguistic concepts to replicate realistic tongue and lip movements.

Computer Skills:

- Knowledge in C/C++, Python, MIPS, HTML, XML, and VHDL programming languages in Windows and Linux environments.
- Use of the Vicon MXUltrane motion capture camera system, and the entire motion capture process, including programming plugins.
- Use of Maya and Blender for 3D modeling and animation, and Photoshop for picture editing, as well as video editing skills in Adobe Premiere.
- Familiarity with several graphics and physics engines including OpenGL, Ogre3d, ODE and Bullet.

Mathematical Skills:

Geometry, Differential Geometry, Trigonometry, Algebra, Calculus, Multivariable Calculus, Combinatorics, Linear Algebra, Ordinary and Partial Differential Equations, Numerical Methods, Optimization, and Finite Mathematics

Languages:

Fluent in English, knowledge of Tagalog, Japanese and basic Korean