Torin J. Adamson

UNM Department of Computer Science

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EDUCATION

UNIVERSITY OF NEW MEXICO, Albuquerque, NM B.S. Computer Science, May 2011 Minor in Japanese Q.P.A. 3.15/4.00 GPA

M.S. Computer Science, May 2016 Q.P.A. 3.64/4.00 GPA

EXPERIENCE

Video Game Engineering (Windows, Linux):

• Experience writing game engines, agent processing engines, graphics, audio synthesis, I/O, small-scale networked games, etc.

Network Software Engineering (Networked Games, Peer-to-peer, HTTP server, etc.):

• Experience implementing basic HTTP servers (HTML, CSS, website service), peer-to-peer systems, networked text-based chat rooms, etc.

Graphic Design, Digital Image Processing:

• Experience using Adobe Photoshop to create graphics, 2D signal processing, etc.

SKILLS

Computer Programming (Windows, Linux):

- C, C++, Java, HLSL, GLSL, Scheme, Haskell, MySQL, GNU Octave, LATEX
- (Assembly) ARM32, MIPS, 6502
- (Website) HTML, CSS, PHP

Tools:

• Microsoft Visual Studio (2005, 2010), GCC, Adobe Photoshop CS2, Blender, Matlab

RESEARCH EXPERIENCE

GRADUATE RESEARCH ASSISTANT

University of New Mexico - AMP Research Group, Albuquerque, NM Januarry 2012 to Present

- Visual and haptic feedback aided ligand human-operated docking simulations.
- Dynamic robotic obstacle avoidance with artificial potential fields and path planning.

PUBLICATIONS

"Molecular Tetris: Crowdsourcing Molecular Docking Using Path-Planning and Haptic Devices." Torin Adamson, John Baxter, Kasra Manavi, April Suknot, Bruna Jacobson, Patrick Gage Kelley and Lydia Tapia.

Motion in Games 2014, ACM SIGGRAPH, November 2014.

"Crowdsourced Molecular Docking Using Path-Planning and Haptic Devices." Torin Adamson, John Baxter, Kasra Manavi, Bruna Jacobson and Lydia Tapia. Workshop on Robotics Methods for Structural and Dynamic Modeling of Molecular Systems, Robotics Science and Systems, 2014.

POSTERS AND PRESENTATIONS

"Haptic-Guided Motion Planning Through Potential Fields."
Torin J. Adamson, John Baxter, Kasra Manavi, and Lydia Tapia.
2014 10th Annual UNM Computer Science Symposium, April 8, 2014. Poster. (1st Place)

"Haptic-Aided Ligand (Antigen) Binding Motion Planning."
Torin J. Adamson, and Lydia Tapia.
2013 9th Annual UNM Computer Science Symposium, March 28, 2013. Poster.

HONORS AND AWARDS

Scholarships

- Van Dyke Software Engr. Sch., 2010-2011
- UNM CS Merit Scholarship, 2007-2010
- Thomas Keller Endowed Scholarship, 2013-2014