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# Rodrigo Gutierrez

## *Curriculum Vitae*

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### Education

- M.S.C.S. • Expected Summer 2008. *University of South Florida, (Tampa, FL)*. Degree in Computer Science from the Department of Computer Science and Engineering. Advisor: Dr. Robin Murphy.
- B.S. • Received July 2005. *University of South Florida, (Tampa, FL)*. Degree in Computer Science from the Department of Computer Science and Engineering. Research Experience for Undergraduates (REU) in Artificial Intelligence-based Robotics with Dr. Robin Murphy. Cumulative 3.0 GPA.

### Research Experience

#### University of South Florida

- 01/2006 – • Graduate Research Assistant, Department of Computer Science. Advisor: Dr. Robin Murphy.
- Terrain Analysis for Human-Robot Interaction (TAH-RI): Robot Navigation, Path Planning, Map Building, and Map Sharing using Multi-layer Maps.
  - Emotion-Based Control of Mobile Robots Using Fuzzy Logic.

#### University of South Florida

- 2004 – 2005 • Research Experience for Undergraduates (REU) Program, Department of Computer Science. Advisor: Dr. Robin Murphy.
- Terrain Analysis for Human-Robot Interaction (TAH-RI): Trulla Terrain-Sensitive Path Planning Algorithm.

### Skills

- Academic • Artificial Intelligence, Artificial Intelligence-based Robotics, Distributed Systems, Fuzzy Logic, Neural Networks, Algorithms, Machine Learning
- Technical • Java, Python, Perl, C, C++,  $\text{\LaTeX}$ , UNIX/Linux, Mac OS/X, Windows, MySQL

### Work Experience

#### Institute for Safety Security Rescue Technology, Tampa, FL

- 01/2006 – • *Research Assistant*. Responsible for creating and maintaining a cartographic component used in a distributed robot architecture which supports path planning, map building, and map sharing within a heterogeneous team of mobile robots. Project lead for a small group researching the use of robot teams to conduct terrain classification. Currently researching artificial emotions and their utility in determining agent behaviors.

## Work Experience (continued)

### Combase Enterprises, Brandon, FL

- 08/2000 – 01/2006
- *Systems Administrator/Programmer*. Developed scripts in Perl and PHP that were used for administrative tasks and web based applications. One application in particular automated the shopping cart delivery process for a site offering phone cards and other VoIP services. This application helped the site become the companies primary revenue source. Installed and upgraded software, as well as implemented security on all UNIX/Linux machines within the facility.

## Honors and Awards

- 03/2008
- Received travel grant to participate in the HRI Pioneers Workshop at the 2008 Third International Conference on Human–Robot Interaction in Amsterdam, The Netherlands.
- 12/2006
- 2<sup>nd</sup> place in the 3<sup>rd</sup> annual Computer Science and Engineering Department’s Outstanding Graduate Research Competition.
- 08/2001 – 07/2002
- Provost’s Scholar.

## Publications

### To Appear

- 2008
- Jeff Craighead, Rodrigo Gutierrez. “Validating The Search and Rescue Gaming Environment As A Robot Simulator By Performing A Simulated Anomaly Detection Task”. *In Proceedings of the IEEE / RSJ International Conference on Intelligent Robots and Systems (IROS 2008)*, 2008.