

Trey Roady

PhD Pre-Candidate, Human Factors Engineer

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OBJECTIVE

Seeking a full-time position in user experience research & development and other human factors-related fields.

EDUCATION

PhD, Interdisciplinary Engineering – Human Factors & Cognitive Systems Expected: December 2016

Texas A&M University, College Station, TX

GPR 3.45 / 4.0

Faculty Advisor: Thomas K. Ferris

BS, Industrial & Systems Engineering, Minor: Psychology May 2012

Texas A&M University, College Station, TX

GPR 3.36/ 4.0

RESEARCH

PhD Pre-Candidate August 2012 – Present

Primary Projects:

- Creative Haptic Interaction At-A-Distance (CHIAD) system: human-human context-sensitive vibrotactile communication and navigation
- Systems Engineering Initiative for Patient Safety – Mobile (SEIPS-m): medical device development framework for evaluation of mobile health technologies

Secondary Projects:

- Security framework for digital voting systems
- Tangible user interface for development of communication skills in non-verbal autistic children
- Analysis of empathy in online communication for identification of flat affect

Student Technician, II April 2011 – August 2012

Projects:

- Creative Haptic Interaction At-A-Distance (CHIAD) system
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Organizations

Human Factors and Ergonomics Society, Student Member 2011 - Present

President, Texas A&M University Chapter 2014 - Present

- Founded local chapter
- Chaired chapter meetings
- Organized resources for chapter activities and documentation

Institute of Industrial Engineers, Student Member 2013 – Present

Cepheid Variable, Member 2007 - Present

Security Officer, AggieCon 47 2015 - 2016

- Recruited, trained, and oversaw security workers for AggieCon event

Student Development Officer 2011- 2012

- Oversaw all recruitment and retention activities and mediated in-group disputes and grievances for roughly 200 individuals.
- Managed formal mentorship program

Student Mentor

2010 - Present

- Provided guidance and hands-on-support for one new freshman each year

PUBLICATIONS

Theses

1. Roady, T. (2012) An analysis of static, dynamic, and apparent motion vibrotactile stimuli. (Undergraduate research thesis).

Peer Reviewed Conference Proceedings

1. Roady, T. and Ferris, T.K. (2014). Supporting speeded navigational communication via gesture-controlled vibrotactile displays. Proceedings of the Human Factors and Ergonomics Society 58th Annual Meeting. Chicago, IL. October. (Presenter)
2. Tippey, K. G., Sivaraj, E., Ardoin, W., Roady, T., and Ferris, T.K. (2014). Texting while driving using Google Glass: investigating the combined effects of heads-up display and hands-free input on driving safety and performance. Proceedings of the Human Factors and Ergonomics Society 58th Annual Meeting. Chicago, IL. October.
3. Roady, T. and Ferris, T.K. (2013). Supporting speeded navigational communication via gesture-controlled vibrotactile displays. Proceedings of the Human Factors and Ergonomics Society 57th Annual Meeting. San Diego, CA. October. (Presenter)
Winner: Best Student Paper Award, Perception & Performance Technical Group
4. Roady, T. and Ferris, T.K. (2012). An analysis of static, dynamic, and saltatory vibrotactile stimuli to inform the design of efficient haptic communication systems. Proceedings of the Human Factors and Ergonomics Society 56th Annual Meeting. Boston, MA. October. (Presenter)

Presentations (without Peer-Reviewed Proceedings)

1. Roady, T. and Ferris, T.K. (2015). SEIPS-m: a SEIPS extension for mobile health development. *Houston Human Factors Symposium*. Houston, TX. May. (Presenter)
2. Roady, T. (2014). Complex tactile interactions over distance to support collaborative navigation tasks. *Institute of Industrial and Systems Engineers Annual Conference and Expo*. Montreal, Canada. May. (Presenter)
3. Roady, T. and Ferris, T.K. (2014). Development of a person-to-person haptic communication system. *Southwest Regional Human Factors & Ergonomics Society Symposium*. College Station, TX. June. (Presenter)

HONORS

Houston HFES Student Travel Award	October 2014
Best Student Paper Award, Perception and Performance TG, HFES Annual Meeting	October 2013
HFES Council of Technical Groups Student Travel Honorarium	October 2013
Undergraduate Research Scholar, Texas A&M University	May 2012
Mayfield Engineering Scholarship	August 2008 - May 2014
Class of '89 Endowed Scholarship	August 2007 - August 2008
President's Endowed Scholarship	August 2007 - August 2008
National Merit Scholar	

SKILLS

Cognitive systems engineering, sociotechnical systems, usability evaluation, user-centered design (heuristic analysis, persona development, and hierarchical task analysis), individual and group decision-making, experimental design for human subjects, human computer interaction, job analysis, ethnography, C/C++, R statistical programming, Microsoft Excel with Visual Basic for Applications, Arena simulation software, wireframe prototyping in Axure, Mechanical Turk, Qualtrics, statistical process control, facilities design, project management, public speaking, debate, computer systems repair and administration, and basic written Spanish competency