

Trey Roady, PhD, AHFP

UX Researcher Human Factors Engineer College Station, TX

Trey@EccentricCog.net
 (On request)
 www.EccentricCog.net

Skills

UX / HCD: Usability Testing Heuristic Walkthrough, Persona Analysis, Work / Task Analysis, Change Management, Axure Prototyping

Ethnography: Survey Development, Qualtrics, mTurk, Industrial Evaluation Job Analysis Contextual Inquiry

Programming: C/C++, Python, R, VBA, HTML, CSS

Systems Engineering: Statistics, Optimization, Quality Control,

Experimental Design, Engineering Management, Simulation, AutoCAD Inventor

Professional: Public Speaking, Debate Technical Writing, Spanish (basic)

Summary

Passionate advocate for human centered systems and translating user benefits into business goals. Blends qualitative research methods with strong quantitative background to define user pain points and drive lean and responsive experiences. Extremely comfortable combining insights from different fields. Notable experience with professional communication, mentorship, and group leadership. Believes strongly in bettering and empowering users by aligning incentives.

Education



PhD: Interdisciplinary Engineering
 Focus: Human Factors & Cognitive Systems
 BS: Industrial & Systems Engineering
 Minor: Psychology

Career

Research Scientist, Seeing Machines
 Human research & validation for AI machine vision systems
 Post-Doctoral Researcher, ACE Lab
 Lab manager for mixed methods research in telehealth, PTSD, & procedures.
 Project manager for investigation of medical interfaces & burnout in nursing
 Research Assistant, HF&CS Lab
 May 2014 - Aug. 2015; May 2016 - Present

- Created FAA technology standards to support cognitive workload & wearables
- Developed systems-oriented mobile medical device design framework, SEIPS-m

Teaching Assistant, College of Engineering

Aug. 2012 - May 2014 Aug. 2015 - May 2015

Aug. 2018 - May 2018

- Mentored 26 Senior Design groups in industry consultation; clients included Fortune 500 companies, NASA, and major hospital systems (2 sem.)
- Facilities Design & Material Handling (2 sem.), Statistical Quality Control (1 sem.), & Introduction to Engineering, Honors (2 sem.)
- Promoted to Lead TA

Student Tech. II, Human Factors & Cognitive Systems Lab Oct. 2011 - Aug. 2012

- Developed: a novel vibrotactile communication interface supporting stress & mental workload.
- Designed, ran, analyzed, and presented 5 user subject studies

Honors

Outstanding Student Member, Texas A&M HFES	Apr. 2017
Winner & Best Presentation: UX Guerilla Design Challenge, H	HFES Sept. 2016
Student Observer: HFES Executive Council Meeting	Apr. 2015
Student Travel Award, Houston HFES	Oct. 2014
* Best Student Paper: HFES Perception & Performance TG	Oct. 2013
Student Travel Honorarium: HFES Council of Technical Gro	ups Oct. 2013
Undergraduate Research Scholar	May 2012
Mayfield Engineering Scholarship	Aug. 2008 - May 2014
President's & Class of '89 Endowed Scholarships	Aug. 2007 - Aug. 2008
National Merit Scholar	



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Organizations

Board Certification in Professional Ergonomics, Associate Human Factors Professional 2016 - Present

Human Factors and Ergonomics Society, Student Member	2011 - Present
Houston Chapter, Student Member	2013 - Present
Texas A&M University Chapter, President	2014 - 2016

Founded chapter, which received Silver award status first two years; now gold

Cepheid Variable, Member	2007 - Present
Head Security Officer, AggieCon 47	Mar. 2016
 Recruited, trained, and supervised 15 security workers for 500 guest, 3 day convention Commended by attendees for professionalism and customer service of volunteer staff 	
Student Development Officer Recruitment numbers broke fire code 4 meetings in a row 	2011 - 2012

- Recruitment numbers broke fire code 4 meetings in a row
- Managed formal mentorship program for 30 students

Student Mentor

2010 - 2016

Publications

Theses

1. Roady, T. (2012) An analysis of static, dynamic, and apparent motion vibrotactile stimuli. Texas A&M University. (Optional undergraduate research thesis)

Journal Articles

 Tippey, K., Roady. T., Rodriguez-Paras, C., Ferris, T.K., Brown, L., and Rantz, W. (In press). General Aviation Weather Alerting: The Effectiveness of Different Visual and Tactile Display Characteristics in Supporting Weather-Related Decision-Making. International Journal of Aerospace Psychology.

Peer-Reviewed Conference Proceedings

- 1. Dinakar, S., Tippey, K., Roady, T., Edery, J., and Ferris, T.K. (2016). Using modern social network techniques to expand link analysis in a nuclear reactor console redesign. Proceedings of the Human Factors and Ergonomics Society 58th Annual Meeting. Washington, DC. September.
- 2. 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.
- 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.
- 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.
 - 5. Roady, T., & Ferris, T. K. (2012). An Analysis of Static, Dynamic, and Saltatory Vibrotactile Stimuli to Inform the Design of Efficient Haptic Communication Systems. In *Proceedings of the Human Factors and Ergonomics Society Annual Meeting* (Vol. 56, No. 1, pp. 2075-2079). SAGE Publications.