

Misty A. Gripper, Ph.D.
Assistant Professor

CONTACT INFORMATION

Wright State University
Department of Biomedical Department of Biomedical, Industrial, and Human Factors
Engineering
260 Russ College of Engineering and Computer Science
Dayton, Ohio 45435
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EDUCATION

Ph.D. in Industrial & Systems Engineering; May 2006
North Carolina Agricultural & Technical State University, Greensboro NC
Major Specialization: Human machine systems/Human factors

Master of Science in Industrial & Systems Engineering; May 2002
North Carolina Agricultural & Technical State University, Greensboro NC
Major Specialization: Human machine systems/Human factors

Bachelor of Science in Industrial Engineering; May 2000
North Carolina Agricultural & Technical State University, Greensboro NC

RESEARCH INTERESTS

Speech intelligibility of communication systems; Auditory perception applications;
Usability testing; Physical ergonomic applications; Human workload and effectiveness

RESEARCH EXPERIENCE

May 1998 – present North Carolina A&T State University Greensboro, NC

Research Assistant

- Responsible for the collecting and analyzing data that will lead to the standardization of the Callsign Acquisition Test developed for the United States Army

May 2004 – Aug 2004 United States Army Research Laboratory Aberdeen, MD

Research Assistant

- Responsible for collecting and analyzing data for optimization of new speech intelligibility testing materials

May 2003 – Aug 2003 United States Army Research Laboratory Aberdeen, MD

Research Assistant

- Responsible for collecting and analyzing data for new speech intelligibility testing materials in a reverberant environment

May 2002 – Aug 2002 United States Army Research Laboratory Aberdeen, MD

Research Assistant

- Responsible for collecting and analyzing data for new speech intelligibility testing materials in noisy environments

May 2001 – Aug 2001 United States Army Research Laboratory Aberdeen, MD
Research Assistant

- Responsible for collecting and analyzing data for speech intelligibility testing materials in a quiet environment

May 2000 – Aug 2000 United States Army Research Laboratory Aberdeen, MD
Research Assistant

- Responsible for collecting and analyzing data for visual target acquisition experimentation

PUBLICATIONS

Osafo-Yeboah, B., Jiang, X., Gripper, M., & Lyons, L. (2006). Comparison of Speech Intelligibility Test Between Air Conduction and Bone Conduction Using the Callsign Acquisition Test. Proceedings of Human Factors and Ergonomics Society Conference. San Francisco CA.

Gripper, M., Rao, M. & Letowski, T. (2006). A Speech Intelligibility Test for Military Applications: Callsign Acquisition Test. Proceedings of Industry, Engineering and Management Systems. Cocoa Beach FL.

Osafo-Yeboah, B., Gripper, M., McBride, M., & Jiang, X. (2006). Effect of Bone Conduction Vibrator Placement on Speech Intelligibility Using the Callsign Acquisition Test (CAT) - A Pilot Study. Proceedings of Industry, Engineering and Management Systems. Cocoa Beach FL.

Gripper, M. & Ntuen C. (2004). The Effects of Male Versus Female Voice on Speech Intelligibility. Proceedings of Industrial Engineering Research Conference (CD available). Houston Texas.

Blue, M., Ntuen, C. & Letowski, T. (2004). Speech Intelligibility of the Callsign Acquisition Test in a Quiet Environment. *International Journal of Occupational Safety and Ergonomics (JOSE)*, 10(2), 179-189.

Blue, M. & Ntuen, C. (2003). Performance Intensity Function of the Callsign Acquisition Test. Proceedings of Industrial Engineering Research Conference (CD available). Dayton Ohio.

Papers in Progress

Comparison of bone conduction and air conduction using the CAT Test

Evaluation of Callsign Acquisition Test (CAT) in Broadband White Noise

Evaluation of Callsign Acquisition Test (CAT) in Reverberation and White Noise

PRESENTATIONS

Gripper, M. & Jiang, S. (December 2005). *Impact of Fluid Power Noise on Audition*.
Poster Presentation for National Science Foundation Symposium Site Visit,
Engineering Research Center for Compact and Efficient Fluid Power, University
of Minnesota.

Gripper, M. (October, 2004). *Auditory Perception and Speech Intelligibility*. Invited talk
presented to Graduate Student Seminar Class, North Carolina Agricultural &
Technical State University.

Gripper, M. (April, 2004). *The Effects of Male and Female Voice on Speech Intelligibility
of the Northwestern University Test No. 6 (NU-6) and Central Institute of the
Deaf W22 (CID W22)*. Invited talk to the Graduate Student Research Symposium,
North Carolina Agricultural & Technical State University.

Blue, M. (April, 2003). *Callsign Acquisition Test (CAT): Development and Validation*.
Invited talk presented to Graduate Student Seminar Class, North Carolina
Agricultural & Technical State University.

TEACHING EXPERIENCE

Fall 2006 Introduction to Human Factors Engineering, Wright State University

Spring 2006 Methods Engineering (INEN 255), North Carolina Agricultural &
Technical State University. Primary Instructor.

Spring 2005 Human Performance, Risk Analysis and Safety (INEN 664), North
Carolina Agricultural & Technical State University. Teaching Assistant.

Fall 2004 Human Machine Systems (INEN 665), North Carolina Agricultural &
Technical State University. Teaching Assistant/Lab Instructor.

Spring 2003/2004 Ergonomics (INEN 370/685), North Carolina Agricultural &
Technical State University. Teaching Assistant.

Fall 2003 Methods Engineering (INEN 255), North Carolina Agricultural &
Technical State University. Teaching Assistant.

HONORS AND AWARDS

Most Outstanding Graduate Student 2006

Alpha Pi Mu Honor Society, Member since 1997

SLOAN Scholar 2002-present

Ronald McNair Fellow 2000-2002

Best Senior Design Project, 2000

National Deans List / Chancellors Scholar, 1998-2000

PROFESSIONAL DEVELOPMENT

Service

Human Factors and Ergonomics Society panelist and moderator for lunch and learn: The Academic Job Search, Spring 2006
SLOAN conference panelist for retention of minority students, Fall 2004
Human Factors and Ergonomics Society, Student Chapter Events Coordinator, 2004
Higher Learning Institute mentor 2002-present
Reviewer of conference paper proposals, Industrial Engineering Research Conference (IERC), 2003/2004
Institute of Human Machine Systems, Recording Secretary, 2003
Alpha Pi Mu, Recording Secretary, 1999

Affiliations

Alpha Pi Mu
Human Factors and Ergonomics Society (HFES)
Institute of Industrial Engineers (IIE)
National Society of Black Engineers (NSBE)
Society of Women Engineers (SWE)