



Department of Mechanical Engineering
ME EN 7960 - Haptics

Student Paper Presentation Schedule

Starting: Thursday 3/31 during class

Thursday 3/31 (Checkpoint 2 Memo Due)

Palmer Hawkins

Brian T. Gleeson, Scott K. Horschel, and William R. Provancher, "Design of a Fingertip-Mounted Tactile Display with Lateral Skin Stretch Feedback," IEEE Transactions on Haptics, Oct-Dec, 2010, 3(4), October-December 2010, pp. 297–301.

Erin Parsons

A.M. L. Kappers and J. J. Koenderink, "Haptic perception of spatial relations," Perception, vol. 28, pages 781 – 795, 1999.

Karl Arthur

L. N. Verner and A. M. Okamura, "Sensor/Actuator Asymmetries in Telemanipulators: Implications of Partial Force Feedback," 14th Symposium on Haptic Interfaces for Virtual Environments and Teleoperator Systems, 2006, pp. 309-314

Peter Howe

Simon Robinson, Parisa Eslambolchilar, Matt Jones, "Evaluating haptics for information discovery while walking," HCI 2009, pp. 93-102.

Tuesday 4/5 (We can push these presentations back to Th. 4/7 if we decide to have checkpoint 2 meetings in Dr. Provancher's office today)

Adam Howe

Komerska, R.; Ware, C.; , "A study of haptic linear and pie menus in a 3D fish tank VR environment," *Haptic Interfaces for Virtual Environment and Teleoperator Systems, 2004. HAPTICS '04. Proceedings. 12th International Symposium on* , vol., no., pp. 224- 231, 27-28 March 2004

Sean Osborn

L. A. Jones. Visual and haptic feedback in the control of force. Experimental Brain Research, 130:269-272, 2000

Troy Arbuckle

M. Nambi, W. R. Provancher, and J. J. Abbott, "On the Ability of Humans to Apply Controlled Forces to Admittance-Type Devices," Advanced Robotics, Special Issue on Physical Human-Robot Interaction Through Force Interfaces, In Press for march Edition.

Muhammad Yazdian

Frisoli, A., Solazzi, M., Salsedo, F., & Bergamasco, M. (December 2008). A Fingertip Haptic Display for Improving Curvature Discrimination. *Presence*, 17(6), 550-561.

Thursday 4/7

Raymond King

Bardorfer, A., M. Munih, et al. (2001). "Upper limb motion analysis using haptic interface." *Mechatronics*, IEEE/ASME Transactions on 6(3): 253-260.

Markus Montadon

Hoover, A.M.; Avadhanula, S.; Groff, R.E.; Fearing, R.S.; , "A rapidly prototyped 2-axis positioning stage for microassembly using large displacement compliant mechanisms," *Robotics and Automation, 2006. ICRA 2006. Proceedings 2006 IEEE International Conference on* , vol., no., pp.289-295, 15-19 May 2006

Ryan Yardley

Okada, K.; Gwan Kim; Pyong Sik Pak; , "Sound Information Notification System by Two-Channel Electrotactile Stimulation for Hearing Impaired Persons," *Engineering in Medicine and Biology Society*, 2007. EMBS 2007. 29th Annual International Conference of the IEEE, vol., no., pp.3826-3829, 22-26 Aug. 2007

Courtney Parsons

Peter Berkelman paper on the Maglev Device (TBD)

Tuesday 4/12

Babak Hejrati

E. Rocon, J.M Belda-Lois, A. F. Ruiz, M. Manto, J. C. Moreno, and J. L. Pons, "Design and Validation of a rehabilitation Robotic Exoskeleton for Tremor Assessment and Suppression" *IEEE Transactions on neural systems and rehabilitation*, Vol. 15, NO. 3, September 2007.

Nikhil Jagannath Nanivadekar

Craig Carignan, Michael Lyszka and Stephen Roderick, "Design of an Arm Exoskeleton with Scapula Motion for Shoulder Rehabilitation" *Advanced Robotics*, 2005, ICAR'05 Proceedings, 12th International Conference, 18-20 July 2005.

Rebecca Koslover

Mario Enriquez, Karon E. MacLean, Backward and common-onset masking of vibrotactile stimuli, *Brain Research Bulletin*, Volume 75, Issue 6, Special Issue: Robotics and Neuroscience, Pages 761-769, 15 April 2008.

Ashley Guinan

Bark, K.; Wheeler, J.W.; Premakumar, S.; Cutkosky, M.R.; "Comparison of Skin Stretch and Vibrotactile Stimulation for Feedback of Proprioceptive Information," *Haptic interfaces for virtual environment and teleoperator systems, 2008. Haptics 2008. Symposium on* , vol., no., pp.71-78, 13-14 March 2008

Thursday 4/14 (Checkpoint 3 Memo Due)

Nathan Caswell

Elliott, L.R.; van Erp, J.B.F.; Redden, E.S.; Duistermaat, M., "Field-Based Validation of a Tactile Navigation Device," *Haptics, IEEE Transactions on*, vol.3, no.2, pp.78-87, April-June 2010

Charles Stewart

R. Riener T. Nef G. Colombo, "Robot-aided neurorehabilitation of the upper extremities," *Med. Biol. Eng. Comput.*, 2005, 43, 2-10

Hamid Sani

Paper: TBD

Josh Schmeiser

Robert J. Webster, III, Todd E. Murphy, Lawton N. Verner, and Allison M. Okamura, "A Novel Two-Dimensional Tactile Slip Display: Design, Kinematics and Perceptual Experiments", *ACM Transactions on Applied Perception*, Vol. 2, No. 2, April 2005, Pages 150–165.

Tuesday 4/19

Checkpoint 3 meetings in Dr. Provancher's office. Same schedule as checkpoint 1 project meetings.

Thursday 4/21

Meet in class to discuss scheduling details of final project presentations and demos. We'll also discuss the final report, which will be in the style of an engineering conference paper (e.g., haptics symposium, or International Conference on Robotics and Automation). These papers will be 6-8 pages in length and will use an IEEE conference paper template as their basis.

Tuesday 4/26

This class period is scheduled as extra office hours during class time (in Dr. P's office). It is also available to work on your projects.

Thursday 4/28

Haptics Final Project Presentations?

Friday 4/29 (10:30-12:30 Final Exam Time slot)

Haptics Project Demos?