

Refereed Journal Papers

- [J1] **Wade, E.**, Chen, C., and Winstein, C. J., *Spectral Analyses of Wrist Motion Data in Individuals Post Stroke: Developing a Performance Measure for Unsupervised Settings*, Neurorehabilitation and Neural Repair, *In press*.
- [J2] **Wade, E.**, Parnandi, A. R., Mead, R., and Matarić, M. M., *Socially Assistive Robotics for Guiding Motor Task Practice*, Paladyn Journal of Behavioral Robotics, 2(4), 2011, pp.218–227.
- [J3] **Wade, E.**, and Winstein, C. J., *Virtual Reality and Robotics for Stroke Rehabilitation: Where Do We Go from Here?*, Topics in Stroke Rehabilitation, 18(6), Nov.–Dec., 2011, pp.685–700.
- [J4] **Wade, E.**, and Asada, H. H., *Conductive Fabric Garment for a Cable-Free Body Area Network: Conductivity Analysis for DC Power-Line Communication over Fabric Media*, IEEE Pervasive Computing, 6(1), Jan.–Mar., 2007, pp.52–58.
- [J5] **Wade, E.**, and Asada, H. H., *Design of a Broadcasting Modem for a DC PLC Scheme*, IEEE/ASME Transactions on Mechatronics, 11(5), Oct. 2006 pp.533–540.

Book Chapters

- [B1] **Wade, E.** et al., “Assisted Ambient Living Applied to Remote Motor Rehabilitation” Handbook on Ambient Assisted Living, IOS Press, *In press*.
- [B2] **Wade, E.** et al., “Power Line Communications for Wearable Applications.” Power Line Communications, John Wiley and Sons, 2010.

Refereed Conference Papers & Abstracts

- [C1] **Wade, E.**, Zeisler, C., Templeman, C., Chen, J. H. *Evidence of motor skill specialization in wrist motion of skilled clinicians*. To appear in proceedings, 2013 Society for Neuroscience Conference, San Diego, CA, Nov. 2013.
- [C2] Chen, J. H., **Wade, E.**, Zeisler, C., Ghanimanti, S., Wei, J. Z., Templeman, M. D. *Wrist Accelerometer Analysis of Competent versus Expert Laparoscopic Surgeons*. To appear in proceedings, 2013 American Association of Gynecologic Laparoscopists, Washington, DC, Nov. 2013.
- [C3] **Wade, E.**, Fan, T. w. *Kinematic performance of the paretic and non-paretic limbs after stroke during a goal-directed reaching task*. To appear in proceedings, 2013 IEEE EMBS Neural Engineering Conference, San Diego, CA, Nov. 2013.
- [C4] **Wade, E.**, Proffitt, R., Kim, B., Lange, B., Requejo, P., Chen, Y. A., Chung, Y. C., Winstein, C. J. *Do Older Adults Plan and Adjust Reaching Movements Similarly for Real and Virtual Targets?*. To appear in proceedings, 2013 Gerontological Society of America Conference, New Orleans, LA, Nov. 2013.
- [C5] **Wade, E.**, Chen, S., and Winstein, C. J. *Kinematic performance of the paretic and non-paretic limbs after stroke during a goal-directed reaching task*. In proceedings, 2012 Society for Neuroscience Conference, New Orleans, LA, Oct. 2012.

- [C6] **Wade, E.**, Profitt, P., Requejo, P., Mulroy, S., and Winstein, C. J., *Visuomotor Reaching Behavior to Virtual and Real Targets Depends on Postural Requirements in Healthy Elders*. In proceedings, 2012 American Congress of Rehabilitation Medicine Conference, Vancouver, BC, Oct. 2012.
- [C7] **Wade, E.**, Parnandi, A., and Matarić, M. J. *Using Socially Assistive Robotics to Augment Motor Task Performance in Individuals Post-Stroke*. In IEEE/RSJ International Conference on Intelligent Robots and Systems, San Francisco, California, Sept. 2011.
- [C8] **Wade, E.**, Dye, J., Mead, R., and Matarić, M. J. *Assessing the Quality and Quantity of Social Interaction in a Socially Assistive Robot-Guided Therapeutic Setting*. In 12th IEEE International Conference on Rehabilitation Robotics, Zurich, Switzerland, Jun. 2011.
- [C9] **Wade, E.**, Chen, S., and Winstein, C. J. *Determination of Nominal Task Difficulty of an Upper Extremity Motor Task Puzzle for Individuals Post-Stroke*, In proceedings, 2011 NASPSA Conference, Burlington, Vermont, Jun. 2011.
- [C10] Charalambous, C., Gerger, M., Cesar, G., **Wade, E.**, Winstein, C. J. *Systematic Investigation of Anticipatory Planning in Goal-Directed Stepping*. In proceedings, 2011 North American Society for the Psychology of Sport and Physical Activity, Burlington, Vermont, Jun. 2011.
- [C11] **Wade, E.**, Chen, S., and Winstein, C. J. *Effectiveness of Accelerometers for Evaluating Upper Limb Involvement During Gait*. In proceedings, 2nd International Conference on Ambulatory Monitoring of Physical Activity and Movement, Glasgow, Scotland, May 2011.
- [C12] Charalambous, C., Lai, Y. H., **Wade, E.**, and Winstein, C. J. *What factors are prioritized for planning actions that require goal-directed positioning?*, In Proceedings of Society for Neuroscience, San Diego, California, Nov. 2010.
- [C13] Mead, R., **Wade, E.**, Johnson, P., St. Clair, A, Chen, S., and Matarić, M. J. *An Architecture for Rehabilitation Task Practice in Socially Assistive Human-Robot Interaction* In 19th IEEE International Symposium in Robot and Human Interactive Communication, Viareggio, Italy, Sept. 2010.
- [C14] **Wade, E.**, Parnandi, A., and Matarić, M. J. *Automated Administration of the Wolf Motor Function Test for Post-Stroke Assessment*. In ICST 4th International ICST Conference on Pervasive Computing Technologies for Healthcare, Munich, Germany, Mar. 2010.
- [C15] Parnandi, A., **Wade, E.**, and Matarić, M. J. *Motor Function Assessment Using Wearable Inertial Sensor*. Proceedings of the 32nd Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Buenos Aires, Argentina, Aug. 2010.
- [C16] **Wade, E.** and Matarić, M. J. *Design and Testing of Lightweight Inexpensive Motion-Capture Devices with Application to Clinical Gait Analysis*. In Proceedings of the International Conference on Pervasive Computing, London, England, Aug. 2009, pp.1–7.
- [C17] Tapus, A., **Wade, E.**, and Matarić, M. J. *Using a Socially Assistive Robot in Gait Recovery and Training for Individuals with Cognitive Impairments*. In AAAI Fall Symposium AI in Eldercare: New Solutions to Old Problems, Arlington, Virginia, Nov. 2008.

- [C18] **Wade, E.**, and Asada, H. H., *DC Behavior of Conductive Fabric Networks with Application to Wearable Sensor Nodes*, *Wearable and Implantable Body Sensor Networks*, International Workshop on Body Sensor Networks, Boston, Massachusetts, Apr. 2006, pp.27–30.
- [C19] **Wade, E.**, and Asada, H. H., *Cable-Free Body Area Network using Conductive Fabric Sheets for Advanced Human-Robot Interaction*, Proceedings of the 27th Annual International Conference of the Engineering in Medicine and Biology Society, Shanghai, China, Sept. 2005, pp.3530–3533.
- [C20] **Wade, E.**, and Asada, H. H., *Electrostatic Analysis and Design of a Cable-Free Body Area Network of Sensor Nodes Using 2D Communication over Conductive Fabric Sheets*, In IEEE/RSJ International Conference on Intelligent Robots and Systems, Edmonton, Alberta, Aug. 2005, pp.3642–3647.
- [C21] **Wade, E.**, and Asada, H. H., *Cable-free wearable systems using conductive fabrics transmitting signals and power*, Smart Structures and Materials: Smart Sensor Technology and Measurement Systems, Proceedings SPIE Vol. 5758, San Diego, California, 2005, pp.285–295.
- [C22] **Wade, E.**, and Asada, H. H., *DC powerline communication network for a wearable health monitoring system*, International Symposium on Power Line Communications and Its Applications, Vancouver, Canada, Apr. 2005, pp.172–175.
- [C23] **Wade, E.**, and Asada, H. H., *Cable-free wearable sensor system using a DC powerline body network in a conductive fabric vest*, Proceedings of the 26th Annual International Conference of the Engineering in Medicine and Biology Society, Volume 2, San Francisco, California, Sept. 2004, pp.5376–5379.
- [C24] **Wade, E.**, and Asada, H. H., *Wearable DC powerline communication network using conductive fabrics*, IEEE International Conference on Robotics and Automation, Volume 4, New Orleans, Louisiana, Apr. 2004, pp.4085–4090.
- [C25] **Wade, E.**, and Asada, H. H., *Flexible material handling system using smart-carriers and powerline communication*, IEEE International Conference on Robotics and Automation, Volume 2, Taipei, Taiwan, Sept. 2003, pp.1711–1716.
- [C26] **Wade, E.**, and Asada, H. H., *Reduced cable smart motors communicating over the DC power bus-line for high degree of freedom systems*, In IEEE/RSJ International Conference on Intelligent Robots and Systems, Volume 2, Las Vegas, Nevada, Oct. 2003, pp.1987–1991.
- [C27] **Wade, E.**, and Asada, H. H., *One-wire smart motors communicating over the DC power bus-line with application to endless rotary joints*, IEEE International Conference on Robotics and Automation, Volume 3, Washington, D.C., May 2002, pp.2369–2374.
- [C28] Liu, C.H., **Wade, E.**, and Asada, H. H., *Reduced-cable smart motors using DC power line communication* IEEE International Conference on Robotics and Automation, Volume 4, Seoul, South Korea, 2001, pp.3831–3838.