

HALLA OLAFSDOTTIR

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EDUCATION

- Ph.D 2008, Penn State University. University Park, PA, USA.
Major in Kinesiology (Motor Control).
Thesis: Age related differences in multi-digit coordination.
- M.Sc 2004, Penn State University, University Park, PA, USA.
Major in Kinesiology (Motor Control).
Thesis: Is the thumb a fifth finger? Studies of digit interaction during force production tasks.
- B.Sc 2000, University of Iceland, Reykjavik, Iceland.
Physical therapy.
Thesis : Measurements of Endurance (Þrekmælingar)

WORK EXPERIENCE

- 2013- **Post Doctoral Researcher**
Laboratoire de Recherche en Informatique, Université Paris-Sud XI, Orsay, France
Development of interaction techniques for mobile touch-screen devices that are based on principles of human physiology and motor control.
- 2008-2012 **Research Engineer/Post Doctoral Researcher**
INFRES , Telecom ParisTech, Paris, France
Conducting experimental work on the topic of Fitts' law in the context of HCI.
Fitts' law is one of the elemental tools the developers in HCI use to estimate the quality of their design. The work included development of theory, formulation and testing of hypothesis, designing and conducting experiments with human participants, manipulation and analysis of data and writing of reports, scientific papers and presentations.
- 2011 **Instructor**
STAPS Université Paris-Sud 11. Orsay, France.
Teaching and overseeing practical lessons on the topic of fundamental experimental psychology.
- 2004 – 2007 **Graduate Research Assistant**
Motor Control Laboratory, Penn State University, University Park, PA, USA.
Conducting experimental research in the Motor Control laboratory. Emphasis on research on the control of multi-digit coordination and age related changes in multi-digit coordination.
Duties involved design and execution of experiments with human participants, software programming, data analysis and the writing of reports, scientific papers and presentations.
- 2003 - 2004 **Graduate Teaching Assistant**
Department of Kinesiology, Penn State University, University Park, PA, USA
KINES 456. Physical fitness appraisal: the basic components of physical fitness, how it can be measured and how it can be developed.

- 2002 **Sleep Disorder Technician**
Landspítali – University Hospital, Reykjavik, Iceland.
Responsible for conducting clinical research on both in- and out patients, to screen for sleep disorders as well as data analysis.
- 2000 - 2002 **Physical Therapist**
Dept. of Pulmonary Medicine, Landspítali - University Hospital, Reykjavik, Iceland.
Responsibilities involved diagnosis and treatment of in- and out patients.

SKILLS

Language	Icelandic:	Mother tongue
	English:	Fluent. 5 ½ year studies in the USA, daily work language.
	French:	Speak fluently, have lived in France for >4 years.
	Danish:	Good. 5 years of studying.
	German:	Average. 3 years of studying.

Programming Matlab, LabView, Java basics.

Statistics SPSS, MiniTab, Matlab, Statistica

ACTIVITIES

- 2010-2012 Reviewer for **ACM Transactions on Computer-Human Interaction (TOCHI)**. International journal for the multidisciplinary field of human-computer interaction.
- 2003 – 2008 Editorial assistant of **Motor Control**. International journal for the multidisciplinary study of voluntary movement.
- 2005 – 2006 **Women in Science and Engineering (WISE)** committee and WISE selection committee for the Boeing-WISE recognition award at Penn State University.
- 2003 – 2007 Rock climbing instructor at the State College YMCA.

SCHOLARSHIPS

- 2002 **Fulbright fellowship** from the Iceland-United States Educational Commission. A grant for Icelandic students that are entering graduate studies in the U.S.
- 2006 **Leifur Eiriksson Foundation Scholarship**. An Icelandic-American research scholarship.

- Olafsdottir, H.B., Guiard, Y., Rioul, O., Perrault, S.T. (2012). A New Test of Throughput Invariance in Fitts' law : Role of the Intercept and of Jensen's Inequality. Proc. BCS HCI 2012. **Best full paper price**
- Guiard, Y., Olafsdottir, H.B. (2011). On the Measurement of Movement Difficulty in the Standard Approach to Fitts' Law. PLoS ONE. 6(10): e24389. doi:10.1371/journal.pone.0024389
- Guiard, Y., Olafsdottir, H.B., Perrault, S.T. (2011). Fitts' law as an explicit Time/Error Trade-off. Proc. CHI'2011. New York: Sheridan Press, 1619-1629.
- Zhang, W., Olafsdottir, H.B., Zatsiorsky, V.M., Latash, M.L. (2009). Mechanical analysis and hierarchies of multidigit synergies during accurate object rotation. Motor Control. 13(3), 251-279.
- Olafsdottir, H.B., Zatsiorsky, V.M., Latash, M.L. (2008). The effects of strength training on finger strength and hand dexterity in elderly individuals. Journal of Applied Physiology. 105(4), 1166-1178.
- Olafsdottir, H.B., Kim, S.W., Zatsiorsky, V.M., Latash, M.L. (2008). Anticipatory synergy adjustments in preparation to self-triggered perturbations in elderly individuals. Journal of Applied Biomechanics. 24(2), 175-179.
- Olafsdottir, H., Zhang, W., Zatsiorsky, V.M., Latash, M.L. (2007). Age related changes in multi-finger synergies in accurate moment of force production tasks. J Applied Physiology. 102(4), 1490-1501.
- Olafsdottir, H., Yoshida, N., Zatsiorsky, V.M., Latash, M.L. (2007). Elderly show an impaired ability to adjust motor synergies in preparation to action. Clinical Biomechanics. 22, 44-51.
- Olafsdottir, H., Yoshida, N., Zatsiorsky, V.M., Latash, M.L. (2005). Anticipatory covariation of finger forces during self-paced and reaction time force production. Neurosci Lett. 381(1-2), 92-96.
- Shim, J.K., Olafsdottir, H., Zatsiorsky, V.M., Latash, M.L. (2005). The emergence and disappearance of multi-digit synergies during force-production tasks. Exp Brain Res. 164(2):260-70.
- Olafsdottir, H., Zatsiorsky, V.M., Latash, M.L. (2005). Is the thumb a fifth finger? A study of digit interaction during force production tasks. Exp Brain Res. 160(2) 203-213.
- Book Chapters**
- Latash, M.L., Olafsdottir, H., Shim, J.K., Zatsiorsky, V.M. (2005). Synergies that stabilize and destabilize action. In: Gantchev N. (Ed.) From Basic motor control to functional recovery – IV, pp. 19-25, Marin Drinov Academic Publishing House: Sofia, Bulgaria.