

Biographical Sketch
MISHA PAVEL, PHD
Northeastern University

A. PROFESSIONAL PREPARATION

Polytechnic Institute of Brooklyn, Brooklyn, NY, USA	Electrical/Biomedical Engineering	B.S., 1970
Stanford University, Stanford, CA, USA	Electrical Engineering	M.S., 1971
New York University, NY, NY, USA	Experimental/Mathematical Psychology	Ph.D., 1980

B. APPOINTMENTS

2013 - present Professor of Practice, College of Computer & Information Science & Bouvé College of Health Science, Northeastern University, Boston, MA

- 2011 - 2014 Program Director for Smart and Connected Health Program at the National Science Foundation
- 2008 - 2013 Chair, Department of Biomedical Engineering, Oregon Health & Science University, Portland, OR
- 2001 - 2013 Director of Point-of-Care Laboratory at Oregon Health & Science University, Portland, OR
- 2001 - 2013 Professor, Department of Biomedical Engineering, Oregon Health & Science University, Portland, OR
- 2001 - 2003 Interim Chair, Department of Biomedical Engineering, Oregon Health & Science University, Portland, OR
- 1997 - 2001 Professor, Department of Electrical and Computer Engineering and Department of Computer Science and Engineering, Oregon Graduate Institute of Science and Technology, Portland, OR
- 1999 - 2002 Associate Department Head, Electrical and Computer Engineering, Oregon Health and Science University, OGI School of Science and Engineering, Portland, OR
- 1993 - 1997 Associate Professor, Department of Electrical Engineering and Department of Computer Science and Engineering, Oregon Graduate Institute of Science and Technology, Portland, OR
- 1997 - 1999 Technology Leader, AT&T Labs West, Research and applications of Internet technology and communications – Healthcare applications, Menlo Park, CA
- 1990 - 1994 Associate Professor, Center for Neural Science and the Dept. of Psychology, New York University, New York, NY
- 1983 - 1990 Assistant Professor, Stanford University, Dept. of Psychology and Dept. of Symbolic Systems, Stanford, CA
- 1970 - 1976 Member of Technical Staff, Bell Laboratories, Holmdel, NJ

C. PRODUCTS

i) Five Products Related to the Project

1. Pavel, M., Jimison, H. B., Korhonen, I., Gordon, C. M., & Saranummi, N. (2015). Behavioral Informatics and Computational Modeling in Support of Proactive Health Management and Care. Biomedical Engineering, IEEE Transactions on, 62(12), 2763-2775.
2. Kaye J. Mattek N, Dodge H, Buracchio T, Austin D, Hagler S, Pavel M, Hayes T.L., One walk a year to 1000 within a year: continuous in-home unobtrusive gait assessment of older adults. Gait Posture 35:197-202
3. Riley, W.T., Martin, C.A., Rivera, D.E., Hekler, E.B., Buman, M.P., Adams, M.A., Pavel, M., & King, A.C. Development of a Dynamical Systems Model of Social Cognitive Theory. Translational Behavioral Medicine. (2016 in press)

4. Austin, D., McNames, J., Klein, K., Jimison, H., & Pavel, M. (2015). A Statistical Characterization of the Finger Tapping Test: Modeling, Estimation, and Applications. *Biomedical and Health Informatics, IEEE Journal of*, 19(2), 501-507.
5. M. Pavel, H. B. Jimison, H. D. Wactlar, T. L. Hayes, W. Barkis, J. Skapik, et al., "The role of technology and engineering models in transforming healthcare," *IEEE Reviews in Biomedical Engineering*, vol. 6, pp. 156-177, 2013.

ii) Five Other Significant Products

1. S. Hagler, H. B. Jimison, and M. Pavel, "Assessing executive function using a computer game: Computational modeling of cognitive processes," *IEEE Journal of Biomedical and Health Informatics*, vol. 18, pp. 1442-1452, 2014.
2. Mathan, S., Ververs, P. D., Dorneich, M., Whitlow, S. D., Carciofinin, J., Erdogmus, D., Pavel, M., Huang, C., Lan, T., & Adami, A. *Neurotechnology for Image Analysis: Searching for needles in haystacks efficiently*. HCI2006, San Francisco
3. Daphna Weinshall; Alon Zweig; Hynek Hermansky; Stefan Kombrink; Frank W. Ohl; Jörn Anemüller; Jörg-Hendrik Bach; Luc Van Gool; Fabian Nater; Tomas Pajdla; et al. Beyond novelty detection: Incongruent events, when general and specific classifiers disagree *IEEE Transactions on Pattern Analysis and Machine Intelligence* 2012;34(10):1886-1901.
4. Dorneich, Michael C., et al. "Supporting real-time cognitive state classification on a mobile individual." *Journal of Cognitive Engineering and Decision Making* 1.3 (2007): 240-270.
5. Jimison HB, Pavel M, Le T. Home-Based Cognitive Monitoring Using Embedded Measures of Verbal Fluency in a Computer Word Game. *IEEE Engineering in Medicine and Biology Conference*. September 2008. Vancouver BC

D. SYNERGISTIC ACTIVITIES

- Invited keynote speaker at a number of engineering and computer science conferences including EMBC, ICDCN, Wireless Health, Wearable Technology, mHealth Institute, etc
- Co-organizer several conferences on wearable and point of care technology
- Several patents in the area of mobile communication, internet applications, and brain-computer interfaces including Dynamic calibration of physiologically driven image triage systems, US 2009/0141007 A1, Intelligent image segmentation system and method for accurate target detection, US 2010/0220904 A1, Intelligent image segmentation system and method for accurate target detection, US 2010/0220904 A1, Wrist communicator, D462336, Neural net based processor for synthetic vision fusion, US 2005/0232512 A1, etc.