

# Curriculum Vitae

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## Ausbildung

1982 Promotion Dr. phil. an der Universität Bern

## Berufserfahrung

2014 - Adjunct Professor, Psychology, University of British Columbia, Canada  
Professor Emeritus, Computing Science, University of Alberta, Canada  
2000 – 2014 Professor of Computing Science, University of Alberta, Canada  
1986 – 2000 Professor of Psychology, University of Alberta, Canada

## Neuere Projekte

2015-2020 Eye Movements in Perception, Interaction and Visual Guidance of Actions (NSERC Discovery grant)  
2011 Surgical Skill Evaluation System (NSERC RTI)  
2010 Investigating the Use of a Multi-Touch Table-Top in Upper Extremity Rehabilitation Programs (Glenrose Hospital Foundation Grant)  
2011-2013 3D Multimedia in Mobile Handheld Edutainment: Impacts and Benefits on Critical Thinking and Learning Performance (SSHRC Strategic Research Grant)  
2009-2014 Attention in Spatial Navigation (NSERC Discovery grant)  
2008-2011 Decision Support for Multi-mode Oil Sands Operations (NSERC Collaborative Research and Development Grant, with F. Forbes, S. Ruecker and J. Ducette)

## Neuere Publikationen in wissenschaftlichen Zeitschriften

Street, C. N. H., Bischof, W. F., Vadillo, M. A., & Kingstone, A. (2015). Inferring others' hidden thoughts: Smart guesses in a low diagnostic world. *Journal of Behavioral Decision Making*. Advance online publication. doi: 10.1002/bdm.1904.

Anderson, N., Anderson, F., Kingstone, A., and Bischof, W. F. (2014). A Comparison of Scanpath Comparison Methods, *Behavior Research Methods*, DOI 10.3758/s13428-014-0550-3.

Annett, M., Gupta, A., and Bischof, W.F. (2014) Exploring and understanding unintended touch during direct pen interaction. *ACM Transactions on Computer-Human Interaction*, 21(5), DOI 10.1145/267415.

Wu, D. W.-L., Anderson, N. C., Bischof, W. F., and Kingstone, A. (2014). Temporal dynamics of eye movements are related to differences in scene complexity and clutter, *Journal of Vision*, 14(9), 1-14.

Wu, D. W.-L., Bischof, W. F., and Kingstone, A. (2014). Natural gaze signaling in a social context. *Evolution & Human Behavior*, 35(3), 211-218.

Anderson, F., and Bischof, W. F. (2014). Augmented reality improves myoelectric prosthesis training. *International Journal on Disability and Human Development*, 13(3), 349-354.

- Chisholm, J. D., Chapman, C. S., Amm, M., Bischof, W. F., Smilek, D., and Kingstone, A. (2014). A cognitive ethology study of first- and third-person perspectives, *PLOS One*, *PLOS One*, 9(3): e92696. doi:10.1371/journal.pone.0092696.
- Wu, D. W.-L., Bischof, W. F., Anderson, N., Jacobson, T., and Kingstone, A. (2014). The influence of personality on social attention. *Personality and Individual Differences*, 60, 25–29.
- Wu, D. W.-L., Bischof, W. F., and Kingstone, A. (2013). Looking while eating: The importance of the consequences of social interaction in social attention. *Scientific Reports*, 3,2356, DOI:10.1038/srep02356.
- Wu, D. W.-L., Chapman, C. S., Walker, E., Bischof, W. F., and Kingstone, A. (2013). Tapping in shared space results in improved synchrony. *Journal of Experimental Psychology: Human Perception and Performance*, 39, 1218-1223.
- Dalrymple, K., Gray, A. K., Perler, B. L., Birmingham, E., Bischof, W. F., Barton, J. J. S., and Kingstone, A. (2013). Eying the eyes in social scenes: Evidence for top-down control of stimulus selection in simultanagnosia. *Cognitive Neuropsychology*, 30, 25-40.
- Bolanzadeh, N., Bischof, W. F., Flores-Mir, C., and Boulanger, P. (2013). Multi-modal Registration of 3D Maxillofacial CBCT and Photogrammetry Data over Time, *DentoMaxillofacial Radiology*, 42(2), 22027087 (41 pages).
- Anderson, N., Bischof, W. F., Laidlaw, K. E. W., Risko, E. F., and Kingstone, A. (2013). Recurrence Quantification Analysis of Eye Movements, *Behavior Research Methods*, 45(3), 842-856.
- Bilash, O., Cheng, I., Wong, V., Basu, A., and Bischof, W.F. (2012) Foreign language learning on mobile devices: implications for Alberta's teachers. *Notos*, 12, 25-40.
- Cheng, I., Sen, A., Basu, A., Bischof, W. F., and Bilash, O. (2012). An integrated edu-media framework for collaborative learning on handhelds. *Advances in Education Research*, (6 pages).
- Anderson, F., Birch, D.W., Boulanger, P., and Bischof, W. F. (2012). Sensor Fusion to Analyze and Evaluate Laparoscopic Surgical Skill, *Computer Aided Surgery*, 17, 269-283.
- Mesa-Munera, E., Ramirez-Salazar, J. F., Bischof, W. F., Boulanger, P., and Branch, J. W. (2012). Influence of Material Model and Modeling Space on the precision of a finite element simulations to predict the deformation of silicone rubber. *Revista avances en Sistemas e Informatica*, 8, 63-70.
- Mesa-Munera, E., Ramirez-Salazar, J. F., Boulanger, P., Bischof, W. F., and Branch, J. W. (2011). Estimation of Vibration and Force Stimulus Thresholds for Haptic Guidance in MIS Training. *Revista Ingenieria Biomedica*, 5(10), 17-22.
- Moreno, C. A., Bischof, W. F., and Hoover, H. J. (2012). Interactive visualization of dependencies. *Computers & Education*, 58, 1296-1307.
- Dalrymple, K. A., Birmingham, E., Bischof, W. F., Barton, J. J. S. and Kingstone, A. (2011). Opening a window on attention: Documenting and simulating recovery from simultanagnosia, *Cortex*, 47, 787-799.
- Dalrymple, K. A., Birmingham, E., Bischof, W. F., Barton, J. J. S. and Kingstone, A. (2011). Experiencing simultanagnosia through windowed viewing of complex scenes. *Brain Research*, 1367, 265-277.
- Anderson, F., Annett, M. K., and Bischof, W.F. (2010). Lean on Wii: Physical Rehabilitation with Virtual Reality and Wii Peripherals. *Annual Review of CyberTherapy and Telemedicine*, 8, 181-184.
- Annett, M., Anderson, F., and Bischof, W.F. (2010). Hands, Tables, and Groups Make Rehabilitation Awesome! *Annual Review of CyberTherapy and Telemedicine*, 8, 3-6.
- Snyder, J. J., and Bischof, W. F. (2010). Knowing where we're heading – when nothing moves. *Brain Research*, 1323, 127-138.

Dalrymple, K. A., Bischof, W. F., Cameron, D., Barton, J. J. S. and Kingstone, A. (2010). Simulating simultanagnosia: spatially constricted vision mimics local capture and the global processing deficit, *Experimental Brain Research*, 202, 445-455.

Annett, M. K., and Bischof, W. F. (2010). Investigating the Usability of Virtual Reality Systems. *Presence*, 19, 131-141.

### **Neuere Konferenzberichte**

Annett, M. K., and Bischof, W. F. (2014). Hands, Hover, and Nibs: Exploring the Other Factors Influencing Stylus Accuracy on Tablets, *Proceedings of Graphics Interface 2015*, (in press).

Furlan, R. M. M. M., Santana, G. A., Amaral, M. S., Nascimento, M. H. M., Yang, R., Bischof, W. F., Motta, A. R., and Las Casas, E. B. (2014). Jogos computacionais controlados pela língua: uma nova abordagem para reabilitação em motricidade orofacial [Computational Games controlled by language: a new approach to rehabilitation in orofacial myology], 22 Congresso Brasileiro de Fonoaudiologia.

Annett, M. K., Anderson, F., Bischof, W. F., and Gupta, A. (2014). The pen is mightier: Understanding stylus behavior while inking on tablets. *Proceedings of Graphics Interface 2014*, pp. 193-200.

Annett, M. K., Ng, A., Dietz, P., Bischof, W. F., and Gupta, A. (2014). How low should we go? Understanding the perception of latency while inking. *Proceedings of Graphics Interface 2014*, pp. 167-174.

Ng, A., Annett, M.K., Dietz, P., Gupta, A., and Bischof, W. F. (2014). In the Blink of an Eye: Investigating Latency Perception during Stylus Interaction. *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems*, Toronto, Canada, April 26 – May 1, 2014, pp. 1103-1112.

Wu, D. W.-L., Jakobsen, T., Anderson, N.C., Bischof, W. F., and Kingstone, A. (2013). Why we should not forget about the non-social world: Subjective preferences, exploratory eye-movements, and individual differences. 35th Annual Meeting of the Cognitive Science Society, Berlin, Germany, July 31 – August 3, 2013, pp. 3801-3806.

Anderson, F., and Bischof, W. F. (2013). Learning and performance with gesture guides, *ACM SIGCHI Conference on Human Factors in Computing Systems*, Paris, France, April 27 – May 2, 2013, pp. 1109-1118.

Annett, M. K., and Bischof, W. F. (2013). Your Left Hand Can Do It Too! Leveraging Intermanual, Symmetric Transfer on Touchscreens, *ACM SIGCHI Conference on Human Factors in Computing Systems*, Paris, France, April 27 – May 2, 2013, pp. 1119-1128.

Cheng, I., Bilash, O., Bischof, W. F., and Basu, A. (2012). Next Generation Handheld Graphics Edutainment for Learning in an Adaptive Student Centric Environment: Constraints and Benefits. *Eurographics*, May 13 – 18, 2012, Cagliari, Sardinia, Italy. CDROM, 6 pages.

Annett, M. K., Anderson, F., and Bischof, W. F. (2012). User perspectives on multi-touch tabletop therapy. *International Conference on Disability, Virtual Reality and Associated Technologies*, Laval, France, September 10 – 12, 2012, 255-260.

Anderson, F., and Bischof, W. F. (2012). Augmented reality improves myoelectric prosthesis training. *Venue: International Conference on Disability, Virtual Reality and Associated Technologies*, Laval, France, September 10 – 12, 2012, CDROM, 9 pages.

Anderson, F. and Bischof, W. F. (2011). Movement consistency by optical tracking correlates with surgical expertise, *Annual Meeting of the Society of American Gastrointestinal and Endoscopic Surgeons*, San Antonio, Texas, USA, March 30 - April 2, 2011.

Rossol, N., Cheng, I., Bischof, W.F. and Basu, A. (2011). A Framework for Adaptive Training and Games in Virtual Reality Rehabilitation Environments. *Proceedings of the The 10th International Conference on Virtual Reality Continuum and Its Applications in Industry*, Hongkong, Dec 11-12, 2011, 343-346.

Radzikowska, M., Ruecker, S., Bischof, W.F., Annett, M., and Forbes, F. (2010). Geared Decisions: Experimenting with decision support visualizations. Proceedings of the 7<sup>th</sup> International Conference on Design and Emotion, Chicago, Oct 5-7, 2010.

Anderson, F., Annett, M., Bischof, W.F., and Boulanger, P. (2010) Virtual Equine Assisted Therapy. Proceedings of IEEE Virtual Reality 2010, Waltham, MA, March 20-26, 2011. 255 - 256.

### **Neuere Buchkapitel**

Annett, M., Anderson, F., and Bischof, W. F. (2015). Activities and Evaluations for Technology-based Upper Extremity Rehabilitation, in: F. Hu, J. Lu, and T.Zu (Eds.) Virtual Reality Enhanced Robotic Systems for Disability Rehabilitation, Hershey, PA: IGI Global, in press.

Bischof, W.F., Anderson, N. C., and Kingstone, A. (2015). Temporal Methods for Eye Movement Analysis, in: C. Klein & U. Ettinger (Eds.) An Introduction to the Scientific Foundations of Eye Movement Research and its Applications, Springer, in press.

Anderson, F., and Bischof, W. F. (2014). Augmented reality improves myoelectric prosthesis training. In P. M. Sharkey and J. Merrick (Eds.) Virtual Reality: Rehabilitation in Motor, Cognitive and Sensorial Disorders (pp. 81-94), New York: Nova Science Publishers.

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