

# **Curriculum Vitae**

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## **Education**

1982 Ph.D. Psychology Universität Bern

## **Employment**

2015 -	Director, scians Ltd.
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
1986 – 2000	Professor of Psychology, University of Alberta, Canada

## **Recent Grants**

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)

## **Recent Publications in Refereed Journals**

Anderson, N. C., Bischof, W. F., & Kingstone, A. (2023). Eye Tracking in Virtual Reality. In: Current Topics in Behavioral Neurosciences. Springer, Berlin, Heidelberg.  
[https://doi.org/10.1007/7854\\_2022\\_409](https://doi.org/10.1007/7854_2022_409)

Bischof, W. F., Anderson, N. C., & Kingstone, A. (2023). Eye and Head Movements while Encoding and Recognizing Panoramic Scenes in Virtual Reality. PLoS ONE 18(2): e0282030.  
<https://doi.org/10.1371/journal.pone.0282030>

Gurtner, L. M., Bischof, W. F., & Mast, F. W. (2023). Gaze restriction and reactivation of place-bound content drive eye movements during mental imagery. Journal of Cognition, 6(1): 51: 1-18. <https://doi.org/10.5334/joc.316>

Pazhooi, F., Luna, K., Bischof, W. F., & Kingstone, A. (2022). A Life History Approach to Artistic Endeavours and Production: The Case of Metal Music. Evolutionary Psychology.  
<https://doi.org/10.1007/s40806-021-00302-z>

Anderson, N. C., Bischof, W. F., Foulsham, T., & Kingstone, A. (2020). Turning the (virtual) world around: Patterns in saccade direction vary with picture orientation and shape in virtual reality. Journal of Vision 2020;20(8):21. doi: <https://doi.org/10.1167/jov.20.8.21>.

Will, P., Bischof, W. F., & Kingstone, A. (2020) The impact of classroom seating location and computer use on student academic performance. PLoS ONE 15(8): e0236131..

- Bischof, W. F., Anderson, N. C., Doswell, M. T., & Kingstone, A. (2020). Visual exploration of omnidirectional panoramic scenes. *Journal of Vision*, 20(7):23, 1-29.
- Furlan, R.M.M.M., Santana, G.A., Bischof, W.F., Motta, A.R., & de Las Casas, E.B. (2019). A new method for tongue rehabilitation with computer games: Pilot Study. *Journal of Oral Rehabilitation*, 46, 518-525.
- Gurtner, L. M., Bischof, W. F., & Mast, F. W. (2019). Recurrence quantification analysis of eye movements during mental imagery. *Journal of Vision*, 19(1):17, 1–17, Doi: 10.1167/19.1.17.
- Street, C. N. H., Bischof, W. F., & Kingstone, A. (2018). Perspective taking and theory of mind in hide and seek. *Attention, Perception & Psychophysics*. Doi: 10.3758/s13414-017-1446-y.
- 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. (2015). A Comparison of Scanpath Comparison Methods, *Behavior Research Methods*, 47(4), 1377-1392.
- 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.

## Recent Book Chapters

- Bischof, W. F., Anderson, N. C. C., & Kingstone, A. (2019). Temporal methods for eye movement analysis. In: C. Klein & U. Ettinger (Eds.). *Eye Movement Research: An Introduction to its Scientific Foundations and Applications*. Berlin: Springer, pp. 407 - 448.
- Bischof, W.F., Anderson, N. C., and Kingstone, A. (2016). *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.
- Annett, M., Anderson, F., and Bischof, W. F. (2016). 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* (pp. 307-338), Hershey, PA: IGI Global.
- 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.

## Recent Presentations

- Anderson, N. C., Bischof, W. F. and Kingstone, A. (2019). Beyond the Screen's Edge Part 1: Eye and Head Movements While Looking at Rotated Scenes in VR. *Proceedings of the 20<sup>th</sup> European Conference on Eye Movements*, Alicante, August 18-22, 74.

Bischof, W. F., Anderson, N. C., Doswell, M. T., and Kingstone, A. (2019). Beyond the Screen's Edge Part 2: Eye and Head Movements While Looking at Rotated Panoramic Scenes in VR. Proceedings of the 20<sup>th</sup> European Conference on Eye Movements, Alicante, August 18-22, 75.

Anderson, N. C., Bischof, W. F. and Kingstone, A. (2018). Turning the (Virtual) World Around: Saccade Biases and Head Rotation When Looking at Natural Scenes in a Virtual Environment.\_Poster presented at the 59th Annual Meeting of the Psychonomic Society, New Orleans, November 15-18, 298.

Bischof, W. F., Solman, G., and Groner, M. (2015). Generalized Recurrence Analysis of Eye Movements. European Conference on Eye Movements, Vienna, August 16-21, Journal of Eye Movement Research, 8(4), 63.

Street, C. N. H., Bischof, W. F., Vadillo, M., and Kingstone, A. (2015). Why we believe more than disbelieve: an error or a smart move? Symposium IX of the Society for Applied Research in Memory and Cognition, Victoria, B.C., Canada, 24-27 June 2015.

Furlan, R. M. M. M., Santana, G. A., Silva, C. N., Motta, A. R., Bischof, W. F., and Las Casas, E. B. (2014). Novo método para reabilitação da força e da mobilidade da língua associado a jogos digitais. Poster presented at the 22º Congresso Brasileiro de Fonoaudiologia, Joinville, SC, Brazil, October 8-11.

Furlan, R. M. M. M., Santana, G. A., Silva, C. N., Motta, A. R., Bischof, W. F., and Las Casas, E. B. (2014). New method for rehabilitation of tongue strength and mobility. Poster presented at the 7<sup>th</sup> World Congress of Biomechanics, Boston, July 6-11.

For a complete list of publications see <http://www.cs.ualberta.ca/~wfb/publications.html>