

Curriculum Vitae – Dr. Gerrit Maus

Education

- DPhil in Psychology** Oct 2004 – Jun 2008
University of Sussex, Brighton, UK
Supervisor: Dr. Romi Nijhawan
- European Diploma in Cognitive and Brain Sciences** Sep 2005 – Mar 2007
Hanse Institute for Advanced Studies, Delmenhorst, Germany
- BSc in Cognitive Science** Oct 2001 – Sep 2004
University of Osnabrück, Germany

Academic Positions

- Nanyang Technological University, Singapore** since Oct 2015
Nanyang Assistant Professor, School of Humanities and Social Sciences
- University of California Berkeley** Sep 2013 – Sep 2015
Associate Research Specialist, Department of Psychology
- California State University, East Bay** Apr – Sep 2015
Lecturer, Department of Psychology
- Université Paris Descartes** Oct – Nov 2014
Visiting Scholar, Laboratoire Psychologie de la Perception
Collaboration with Dr. Patrick Cavanagh
- University of California Berkeley** Jan 2010 – Sep 2013
Postdoc, Department of Psychology
Advisor: Dr. David Whitney
- Smith-Kettlewell Eye Research Institute, San Francisco** Jan – Mar 2013
Research Fellow
Eye movement project with Dr. Stephen Heinen
- University of California Davis** Nov 2008 – Dec 2009
Postdoc, Center for Mind and Brain
Advisor: Dr. David Whitney
- University of Glasgow** Jul – Aug 2008
Visiting Scholar, Centre for Cognitive Neuroimaging
fMRI project with Dr. Lars Muckli
- University of Sussex** Oct 2007 – May 2008
Research Assistant, Department of Psychology
Work with Dr. Jamie Ward on synaesthesia
- Max Planck Institute for Brain Research** Jun – Aug 2005, Jul – Aug 2006
Visiting PhD student, Department of Neurophysiology
Training in fMRI in Prof. Wolf Singer's group

Teaching Experience

- Nanyang Technological University** Oct 2015 – present
HP3603 Sensation & Perception
HP2200 Biological Psychology
MD9104 Introduction to Neuroscience
- California State University, East Bay** Apr – Sep 2015
Lecturer for *Sensation & Perception* course
- University of California Berkeley** Oct 2012
Guest Lecture on Visual Neuroscience for *Biological Psychology* course.
- University of Sussex, UK** Oct 2007 – Jun 2008
Guest Lectures
- Multisensory Perception and Synaesthesia for *Biological Psychology* course
- Motion Perception for *Perception and Attention* course
- University of Sussex, UK** Oct 2005 – Jun 2008
Associate Tutor. Seminar teaching for Psychology undergraduate courses
- *Cognitive Psychology*
- *Perception and Attention*
- *Introduction to Biological Psychology*
- University of Sussex, UK** Oct 2004 – Sep 2007
Graduate Teaching Assistant.
- University of Osnabrück, Germany** Oct 2002 – Jul 2004
Tutor for Computer Science course *Object-oriented programming in Java*.

Grants

Active

- Merlion Project Grant by Institute Français (PI with Mark Wexler, Paris), 2017-2018, € 30,000
- Nanyang Assistant Professor Startup Grant (PI) competitively awarded, 2015-2018, S\$ 999,000

Completed

- NSF EAPSI fellowship, Host-PI with Katherine Mussell, Michael Webster, University of Nevada Reno, 2016

Publications

° denotes a supervised trainee

°Chen, Z., Denison, R., Whitney, D., & **Maus, G.W.** (in preparation). Illusory occlusion affects stereoscopic depth perception. *in preparation*

Maus, G.W., Duyck, M., Lisi, M., Collins, T., Whitney, D., & Cavanagh, P. (2017). Target displacements during eye blinks trigger automatic recalibration of gaze direction. *Current Biology* 27(3): 445-450. doi:10.1016/j.cub.2016.12.029

Veras, C., Pham, Q.-C., & **Maus, G.W.** (2017). The Silhouette Zoetrope: a new blend of motion, mirroring, depth, and size illusions. *iPerception* 8(2): 1-8. doi:10.1177/2041669517700912

- °Chen, Z., **Maus, G.W.**, Whitney, D., & Denison, R. (2017). Filling-in rivalry: Perceptual alternations in the absence of retinal image conflict. *Journal of Vision* 17(1): 8. doi:10.1167/17.1.8
- Maus, G.W.** & Whitney, D. (2016). Motion-dependent filling-in of spatiotemporal information at the blind spot. *PLoS ONE* 11(4): e0153896. doi:10.1371/journal.pone.0153896
- Maus, G.W.**, Potapchuk, E., Watamaniuk, S.N.J., & Heinen, S.J. (2015). Different time scales of motion integration for anticipatory smooth pursuit and perceptual adaptation. *Journal of Vision* 15(2), 16. doi:10.1167/15.2.16
- Maus, G.W.**, Fischer, J., & Whitney, D. (2013). Motion-dependent representation of space in area MT+. *Neuron* 78(3), 554-562. doi:10.1016/j.neuron.2013.03.010
- Maus, G.W.**, Chaney, W., Liberman, A., & Whitney, D. (2013). The challenge of measuring long-term positive aftereffects. *Current Biology* 23(10), R438-439. doi:10.1016/j.cub.2013.03.024
- Maus, G.W.**, Ward, J., Nijhawan, R., & Whitney, D. (2013). The perceived position of moving objects: Transcranial magnetic stimulation of area MT+ reduces the flash-lag effect. *Cerebral Cortex* 23(1), 241-247. doi:10.1093/cercor/BHS021
- Kosovicheva, A.A., **Maus, G.W.**, Anstis, S., Cavanagh, P., Tse, P.U., & Whitney, D. (2012). The motion-induced shift in the perceived location of a grating also shifts its aftereffect. *Journal of Vision* 12(8), 7. doi:10.1167/12.8.7
- Maus, G.W.**, Fischer, J., & Whitney, D. (2011). Perceived positions determine crowding. *PLoS ONE* 6(5), e19796. doi:10.1371/journal.pone.0019796
- Maus, G.W.**, Weigelt, S., Nijhawan, R., & Muckli, L. (2010). Does area V3A predict positions of moving objects? *Frontiers in Psychology* 1, 186. doi:10.3389/fpsyg.2010.00186
- Maus, G.W.**, Khurana, B., & Nijhawan, R. (2010). History and theory of flash-lag: past, present, and future. In R. Nijhawan & B. Khurana (eds.) *Space and time in perception and action*. Cambridge, UK: Cambridge University Press. doi:10.1017/CBO9780511750540.027
- Banissy, M., Cohen Kadosh, R., **Maus, G.W.**, Walsh, V., & Ward, J. (2009). Prevalence and characteristics of mirror-touch synaesthesia. *Experimental Brain Research* 198(2-3), 261-272. doi:10.1007/s00221-009-1810-9.
- Maus, G.W.** & Nijhawan, R. (2009). Going, going, gone: Localizing abrupt offsets of moving objects. *Journal of Experimental Psychology: Human Perception and Performance*, 35(3), 611-626. doi:10.1037/a0012317.
- Maus, G.W.** & Nijhawan, R. (2008). Motion extrapolation into the blind spot. *Psychological Science*, 19(11), 1087-1091. doi:10.1111/j.1467-9280.2008.02205.x
- Maus, G.W.** (2007). Swimming with and against the stream: Does motor adaptation to lateral forces influence visual motion perception? *Journal of Neuroscience*, 27(49), 13367-13368. doi:10.1523/jneurosci.4545-07.2007.
- Maus, G.W.** & Nijhawan, R. (2006). Forward displacements of fading objects in motion: The role of transient signals in perceiving position. *Vision Research*, 46(26), 4375-4381. doi:10.1016/j.visres.2006.08.028.

Conference Contributions

- °Ang, A.J.W., **Maus, G.W.** (submitted). Attentional boost after eye blinks. *Poster to be presented at ECVP 2017 in Berlin, Germany.*
- °Lau, W.K., Fischer, J., & **Maus, G.W.** (submitted). Multi-modal serial dependence: No effect in audition, but vision survives auditory interference. *Talk to be presented at ECVP 2017 in Berlin, Germany.*
- Maus, G.W.**, Collins, T. (2016). Single-blink adaptation of gaze direction to correct for oculomotor errors. *Talk presented at ECVP 2016 in Barcelona, Spain.*
- Maus, G.W.**, Collins, T. (2016). Adaptation of gaze direction following single eye blinks. *Talk presented at APCV 2016 in Perth, Australia.*
- Maus, G.W.**, °Chen, Z., & Denison, R.D. (2016). Illusory occlusion can trump binocular disparity. *Poster presented at VSS 2016 in St. Pete's Beach, FL.*
- Lee, A.L.F., °Ann, C.N., & **Maus, G.W.** (2016). The interaction between local and global noise for optic flow patterns. *Talk presented at VSS 2016 in St. Pete's Beach, FL.*
- Maus, G.W.**, Cavanagh, P., Collins, T., Duyck, M., Lisi, M., Wexler, M., & Whitney, D. (2015) Automatic gaze corrections triggered by blinks. *Talk presented at APCV 2015 in Singapore.*
- Maus, G.W.**, Cavanagh, P., Collins, T., Duyck, M., Lisi, M., Wexler, M., & Whitney, D. (2015) Target displacements during blinks trigger corrective gaze adaptation. *Talk presented at VSS 2015 in St. Pete's Beach, FL.*
- °Chen, Z., Denison, R.D., Whitney, D., & **Maus, G.** (2015). Ambiguous filling-in at the blind spot resolved through perceptual rivalry. *Poster presented at VSS 2015 in St. Pete's Beach, FL.*
- Cavanagh, P., Duyck, M., Eymond, C., **Maus, G.**, Schumann, F., Störmer, V., Veenemans, A., Whitney, D., & Wu, D. (2015). Feeling the future. *Poster presented at VSS 2015 in St. Pete's Beach, FL.*
- Cavanagh, P., Duyck, M., Eymond, C., **Maus, G.**, Schumann, F., Störmer, V., Veenemans, A., Whitney, D., & Wu, D. (2014). Feeling the future. *Presented at GDR Vision Meeting in Lyon, France.*
- Maus, G.W.** & Whitney, D. (2014). Motion-dependent filling-in at the blind spot. *Journal of Vision 14(10), 1331. Talk presented at VSS 2014 in St. Pete's Beach, FL. doi:10.1167/14.10.1331*
- Chaney, W., Fischer, J., **Maus, G.W.**, & Whitney, D. (2014). Spatial attention reduces correlated noise in the fMRI response. *Journal of Vision 14(10), 620. Poster presented at VSS 2014 in St. Pete's Beach, FL. doi:10.1167/14.10.620*
- Maus, G.W.**, Ivry, R.B., & Whitney, D. (2013). Impaired perceptual prediction in patients with cerebellar atrophy. *Poster presented at the Neuropsychology workshop 2013 at the University of Leuven, Belgium.*
- Maus, G.W.**, Potapchuk, E., Watamaniuk, S.N.J., & Heinen, S.J. (2013). Opposite effects of adaptation and priming: Speed discriminations during smooth pursuit. *Perception 42 ECVP Abstract Supplement, 184. Poster presented at ECVP 2013 in Bremen, Germany. doi:10.1068/v130276*

- Maus, G.W.**, Ivry, R.B., & Whitney, D. (2012). The flash-lag effect is reduced in patients with cerebellar atrophy. *Journal of Vision* 12(9), 155. *Poster presented at VSS 2012 in Naples, FL.* doi:10.1167/12.9.155
- Bulakowski, P.F., **Maus, G.W.**, °Wurnitsch, N., & Whitney, D. (2012). Shifting perceptual biases in auditory-visual temporal order judgments. *Poster presented at APS Annual Convention 2012 in Chicago, IL.*
- Maus, G.W.** & Whitney, D. (2011). Visual crowding is based on perceived positions. *Talk presented at CSAIL in Hood River, OR.*
- Maus, G.W.**, °Li, J., & Whitney, D. (2011). Asymmetrical spatial distortions of moving objects. *Journal of Vision* 11(11), 735. *Poster presented at VSS 2011 in Naples, FL.* doi:10.1167/11.11.735
- Kosovicheva, A.A., **Maus, G.W.**, Anstis, S., Cavanagh, P., Tse, P.U., & Whitney, D. (2011). The motion-induced shift of the perceived location of a grating also shifts its aftereffect. *Journal of Vision* 11(11), 754. *Poster presented at VSS 2011 in Naples, FL.* doi:10.1167/11.11.754
- °Wurnitsch, N., **Maus, G.W.**, Bulakowski, P.F., & Whitney, D. (2011). Collisions are seen before they are heard. *Journal of Vision* 11(11), 736. *Poster presented at VSS 2011 in Naples, FL.* doi:10.1167/11.11.736
- Maus, G.W.**, Fischer, J., & Whitney, D. (2010). Crowded by drifting Gabors: Is crowding based on physical or perceived stimulus position? *Journal of Vision* 10(7), 1349. *Talk presented at VSS 2010 in Naples, FL.* doi:10.1167/10.7.1349
- Maus, G.W.**, Fischer, J., & Whitney, D. (2009). Dragging it out: motion-sensitive areas code perceived positions in the motion-induced flash mislocalization illusion. *Poster presented at SfN 2009 in Chicago, IL.*
- Maus, G.W.**, Fischer, J., & Whitney, D. (2009). Motion distorts position coding of flashes in primary visual cortex. *Perception* 38, ECVF Abstract supplement, 123. *Poster presented at ECVF 2009 in Regensburg, Germany.*
- Maus, G.W.**, Hutton, S.B., Nijhawan, R., Whitney, D., & Ward, J. (2009). Reduction of the flash-lag effect with TMS over MT/V5. *Journal of Vision* 9(8), 646. *Talk presented at VSS 2009 in Naples, FL.* doi:10.1167/9.8.646
- Maus, G.W.**, Weigelt, S., Nijhawan, R., & Muckli, L. (2008). Activity in area V3A predicts positions of moving objects. *Perception* 37, ECVF Abstract supplement, 83. *Talk presented at ECVF 2008 in Utrecht, Netherlands.*
- Ward, J., **Maus, G.W.**, Meijer, P., & Strahl, S. (2008). Helping the blind to see with sound: A man-made synaesthesia. *Talk presented at the Annual General Meeting 2008 of the UK Synaesthesia Association in Edinburgh, UK.*
- Maus, G.W.** & Nijhawan, R. (2008). Motion into and out of the blind spot: Evidence for spatial extrapolation of moving objects. *Perception* 37(2), 308. *Talk presented at the AVA Christmas meeting 2007 in Birmingham, UK.* doi:10.1068/ava07
- Maus, G.W.** & Nijhawan, R. (2007). Competition for perception: Internal models vs retinal transients in perceiving positions of moving objects [Abstract]. *Journal of Vision* 7(9), 987. *Poster presented at VSS 2007 in Sarasota, FL.* doi:10.1167/7.9.987
- Maus, G.W.** & Nijhawan, R. (2007). Sudden disappearance of moving objects overrides motion extrapolation. *Perception* 36(2), 308. *Poster presented at the AVA Christmas meeting 2006 in Birmingham, UK.* doi:10.1068/ava06

Nijhawan, R. & **Maus, G.W.** (2006). Movement of invisible limbs distorts visual space. *Talk presented at ASSC10 in Oxford, UK.*

Maus, G.W. (2005). The role of visual transients in perceiving the final position of moving objects. *Invited talk at a Rank Prize Funds Mini-Symposium on 'Active Vision' in Windermere, UK.*

Maus, G.W. & Nijhawan, R. (2005). Transient signals mask extrapolated position information of moving objects. *Talk presented at ASSC9 in Pasadena, CA.*

Maus, G.W. & Nijhawan, R. (2004). Final position of a gradually disappearing moving object is spatially extrapolated. *Perception 33*, ECVF Abstract supplement, 162c. *Poster presented at ECVF 2004 in Budapest, Hungary.*

Invited Talks

- German National Scholarship Foundation Summer School, Munich Sep 2016
- National University of Singapore, Department of Psychology Mar 2016
- International Symposium on Cognition and Neuroscience, NTU Feb 2016
- Duke-NUS Medical School Singapore Dec 2015
- NASA Ames Research Center Jun 2015
- California State University Bakersfield Mar 2015
- University of Cologne, Department of Psychology Mar 2015
- Nanyang Technological University, Singapore Feb 2015
- Smith-Kettlewell Eye Research Institute, San Francisco Feb 2015
- University of California Davis, Department of Psychology Nov 2014
- Ludwig-Maximilians-Universität Munich, Department of Psychology Oct 2014
- University of Aberdeen, School of Psychology Oct 2014
- University of Glasgow, Institute for Neuroscience and Psychology Oct 2014
- Université Paris Descartes, Laboratoire Psychologie de la Perception Oct 2014
- Bangor University, UK, School of Psychology Jul 2014
- University of York, UK, Department of Biology Jun 2014
- University of Nevada, Reno, Department of Psychology Jan 2014
- California State University Channel Islands, Camarillo Oct 2013
- Smith-Kettlewell Eye Research Institute, San Francisco Apr 2013
- University of Kiel, Institute of Psychology Oct 2012
- University of Bielefeld, Faculty of Biology May 2012
- University of Münster, Department of Psychology May 2012
- Swansea University, Department of Psychology Feb 2012
- University of California Berkeley, Department of Psychology Oct 2010
- University of California Davis, Center for Mind and Brain Aug 2008
- University of Glasgow, Centre for Cognitive Neuroimaging Jul 2008
- Universitat de Barcelona, Institute for Brain, Cognition and Behaviour Jun 2008
- University of Sussex, Department of Psychology Mar 2007
- Rank Prize Funds Mini-Symposium on Active Vision, Windermere, UK Oct 2005
- University of Osnabrück, Institute of Cognitive Science Apr 2004

Press Coverage (selected)

- **Straits Times, Singapore:** “What stops your vision from going on the blink” Apr 2017
<http://www.straitstimes.com/singapore/what-stops-your-vision-from-going-on-the-blink>
- **Optometry Today:** “An every day circus act” <https://www.aop.org.uk/ot/science-and-vision/research/2017/01/26/an-everyday-circus-act> Jan 2017

- **Wired Magazine Italy:** “Perché quando sbattiamo le palpebre non vediamo ‘a intermittenza’?” Jan 2017
<https://www.wired.it/scienza/lab/2017/01/24/palpebre-vista-cervello/>
- **Medical Daily:** “3 surprising things that happen in your brain and eyes when you blink” Jan 2017
<http://www.medicaldaily.com/3-surprising-things-happen-your-brain-and-eyes-when-you-blink-409013>
- **AAAS Science Update** Radio News Feature: “Tracking fastballs” Oct 2013
<http://www.scienceupdate.com/2013/10/ball/>
- **CBC “Quirks & Quarks”** Radio Interview: “Seeing faster than the eye can follow” May 2013
<http://www.cbc.ca/quirks/episode/2013/05/11/may-11-2013/#6>
- **NBC News Science:** “How our brains can track a 100 mph fastball” May 2013
http://science.nbcnews.com/_news/2013/05/08/18129836-how-our-brains-can-track-a-100-mph-fastball
- **Los Angeles Times:** “Your brain on baseball: How hitters see a 95-mph fastball” May 2013
<http://touch.latimes.com/#section/-1/article/p2p-75846143/>
- **San Jose Mercury News:** “UC Berkeley scientists pinpoint how brain tracks fast-moving baseball pitches and tennis serves” May 2013
http://www.mercurynews.com/science/ci_23201778/

Reviewing Activity

Journals

- Attention, Perception, and Psychophysics
- Biology Letters
- Brain Structure and Function
- Cerebral Cortex
- Cognitive Science
- Consciousness and Cognition
- Current Biology
- Experimental Brain Research
- Frontiers in Consciousness Research
- Frontiers in Perception Science
- Journal of Cognitive Neuroscience
- Journal of Experimental Psychology: Human Perception and Performance
- Journal of Neurophysiology
- Journal of Vision
- NeuroImage
- Perception
- PLoS Computational Biology
- PLoS ONE
- Psychological Bulletin
- Psychophysiology
- Scientific Reports
- Vision Research
- Visual Cognition

Grant Agencies

- Helmholtz Association

Conferences

- European Conference on Visual Perception

Memberships

- Applied Vision Association, UK (AVA)
- German Academic International Network (GAIN)
- Society for Neuroscience (SfN)
- Vision Sciences Society (VSS)