
Contact Information

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Lab Profile: <https://uwaterloo.ca/vision-attention-lab/people-profiles/dr-martin-lochner>

Education

- Ph.D. in Neuroscience and Applied Cognitive Science Jan 2012
University of Guelph, Ontario, Canada
Supervisors: Lana Trick (Psychology); Blair Nonecke (CS)
- M.A. in Cognitive Psychology, Multi-modal Attention May 2005
University of Waterloo, Ontario, Canada
Supervisors: Jenn Stolz, Derek Besner
- B.A. Hons. in Cognitive Neuroscience (Arts / Business track) May 2002
University of Waterloo, Ontario, Canada
Supervisor: Mike Dixon

Current Appointments

- 2022 – Present Research Co-ordinator | Security Data Analyst, eSentire Inc.
- 2017 – Present Research Associate, Vision and Attention lab
University of Waterloo, Department of Psychology
- 2019 – Present Adjunct Lecturer, Department of Psychology, University of Waterloo

Current Research Interests (2025)

Topic Modelling of cybersecurity professionals’ use of Large Language Models (e.g., GPT-4) in live security operations; Leveraging this knowledge to develop a novel collaborative intelligence (co-intel) platform for cybersecurity operations. Development of MCP GenAI pipeline for LLM security detections. Management of MITACS and NSERC research programs for eSentire Labs.

Employment History

Past Academic Appointments

- 2014 – 2021 Adjunct Lecturer, Human Computer Interaction
University of Tasmania, Department of Psychology
- 2018 – 2019 Research Associate, Cognitive Informatics / Collaborative Intelligence
Commonwealth Scientific and Industrial Research Organisation / Data61
- 2013 – 2017 Post-Doctoral Fellow, Cognitive Informatics / Cyber-Physical Systems
Commonwealth Scientific and Industrial Research Organisation

Applied Research Placements

- 2017-2019 **Commonwealth Scientific and Industrial Research Organization (CSIRO)**
PROJECT LEAD | AUTOMATION, TRUST AND WORKLOAD
- Proposed & Executed interdisciplinary research project. Co-ordinated 7 Faculty and 298k funding over 2-year period incl. 3 Departments (Engineering, CS, Psychology) and 4 Institutions. Delivered multiple outputs: software, hardware, and publication / dissemination.
- 2013-2017 **Commonwealth Scientific and Industrial Research Organization (CSIRO)**
RESEARCH OFFICER | COGNITIVE INFORMATICS TEAM
- HCI applications in **Mining Informatics; Visual Information Processing, Maritime Shipping & Remote Piloting; Materials Informatics; Autonomous Systems; Cognitive Informatics**
- 2009-2010 **Mercedes-Benz Research & Development North America**
HCI RESEARCHER | HUMAN-MACHINE INTERACTION LAB
- Testing of Freightliner Trucks cab console and information system design
- User Experience Design, detailed review of MIL HFE standards as relevant to truck design
- 2007-2008 **Carleton University, Department of Psychology**
HCI RESEARCHER | HUMAN ORIENTED TECHNOLOGY LAB
-Operations testing of hybrid light/heat sensing Night Vision Goggles (DND funding)
- 2006-2007 **Transport Canada, Ergonomics and Crash Avoidance Division**
HUMAN FACTORS SPECIALIST
-Attention benchmarking of Lexus, Mercedes, and BMW GPS/on-board information systems
- 2000-2001 **Transport Canada, Ergonomics Division**
HUMAN FACTORS SPECIALIST
-Human Factors testing: cell phone use and distraction in live and simulated driving
- 1999-2000 **Royal Canadian Mounted Police, Technical and Protective Operations**
SECURE NETWORK DESIGN, NETWORK ADMINISTRATION
-Physical networking and admin of secure TCP/IP information system for RCMP, Quebec
- 1998-1999 **Toyota Motor Manufacturing Canada**
USER EXPERIENCE DESIGN
-Developed early HTML-based web applications to replace paper HR policy manuals

1996-1997 **University of Waterloo, Departments of Math, Biology**

USER EXPERIENCE DESIGN

-Developed first Graphics-Based webpages for UW Departments of Math, Biology

Wayback machine:

(old version) <https://web.archive.org/web/19970408230014/http://math.uwaterloo.ca/>

(my 1996 design) <https://web.archive.org/web/19980210014831/http://math.uwaterloo.ca/>

Types of Experience

Project Management

- Automation Trust and Workload - CSIRO / University of Tasmania / University of South Australia
- Unlocking Security Insights Through Log Analysis in LLM-Powered Applications - NSERC / University of Guelph / eSentire Labs
- Novel Characteristic Extraction and Cybersecurity Detections for Generative AI - MITACS / University of Guelph / eSentire Labs
- Novel Generative AI tools for collaborative intelligence in Cybersecurity - MITACS / University of Waterloo / eSentire Labs
- Automated log parsing of unpredictable raw response JSON for LLM cybersecurity detections - MITACS / University of Waterloo / eSentire Labs

Research:

University of Waterloo – Vision and attention lab (Dan Smilek); Besner-Stolz Cognition Lab; Synaesthesia Research Group (Mike Dixon)

University of Guelph – Driving Research in Virtual Environments lab (Lana Trick)

Carleton University – Human Oriented Technology Lab (Avi Parush); Aviation and Cognitive Engineering Lab (Chris Herdman)

University of Tasmania – Tasmanian Cognition Lab (Andrew Heathcote)

Commonwealth Scientific and Industrial Research Organization (Craig Lindley)

Transport Canada – Ergonomics and Crash Avoidance Division (Joanne Harbluk)

Mercedes Benz – Human Machine Interaction Lab (Steve Wreggit)

Design:

UTAS Serious Games Group (Kristy de Salis)

Tasmanian Cognition Lab (Andrew Heathcote)

Human Oriented Technology Lab (Avi Parush)

Human Machine Interaction Lab (Mercedes)

CSIRO Cognitive Informatics; Autonomous Systems Division (Craig Lindley)

eSentire Labs (Rapid Prototyping team) (Alexander Feick)

Teaching:

University of Waterloo (Faculty of Arts, Psychology)

University of Guelph (Psychology)

University of Tasmania (Computer Science)

Connestoga College (Liberal Studies, AI & HCI)

Leadership

CSIRO – Trust in Automation project; Molecular Chirality project, others

University of Waterloo – graduate and undergraduate; cybersecurity focus group

University of Guelph– graduate and undergraduate

University of Tasmania – undergraduate engineering research projects

Coding / AI & Machine Learning / Big Data / other computing experience

CSIRO / Autonomous Systems Division / Data61 (machine learning, brain computer interfaces, eye tracking, electroencephalography, GSR, machine vision, python, cognitive robotics)
eSentire Labs (rapid prototyping team) (python, big data, SQL, LLMs, topic modelling)
D.R.I.V.E. lab (tcl-tk programming of commercial driving simulator for PhD Research Program)
University of Waterloo Department of Mathematics (PERL programming)
Royal Canadian Mounted Police (network administration, hardware)
University of Waterloo (UI Design, HCI, HTML coding)

External Research Funding

Summary: \$573,000 (AUD and CAD)

- 2025 Unlocking Security Insights Through Log Analysis in LLM-Powered Applications – NSERC / U. Guelph / eSentire - \$150,000 CAD
-extension of 2024 LLM log parsing system, production deployment, related publications
- 2025 Novel Characteristic Extraction and Cybersecurity Detections for Generative AI - MITACS / University of Guelph / eSentire Labs – \$15,000 CAD
-Development of threat detection pipeline for Managed Detection & Response to LLM cyberthreats
- 2024 Novel Generative AI tools for collaborative intelligence in Cybersecurity - MITACS / University of Waterloo / eSentire Labs – \$15,000 CAD
-Development of innovative UI for LLM threat cybersecurity analysis
- 2024 Automated log parsing of unpredictable raw response JSON for LLM cybersecurity detections - University of Waterloo / eSentire Labs – \$15,000 CAD
-Initial development of novel ML based log parsing system, to deal with unstructured raw LLM response logs, to enable Managed Detection and Response to Large Language Model cyberthreats
- 2017 Automation, Trust and Workload: CSIRO / UTAS / UNISA / UW -\$298,000 AUD
Interdisciplinary Collaborative Research Project
-investigations into the relationship between trust and human workload when operating autonomous systems
- 2016 Menzies Institute, Royal Hobart Hospital. Hobart, Tasmania \$25,000 AUD
-Brain-Computer-Interface + robotics platform for stroke rehabilitation
- 2015 Australian Maritime College (Bridge Team Workload project) \$50,000 AUD
-Quantify the impact of bridge automation (remote pilotage equipment) during emergency situations on ship's bridge
- 2011 College of Social and Applied Human Science: Dean's Scholarship \$5,000 CAD
-driving simulation and multiple object tracking
- 2010 University of Guelph Board of Graduate Studies Research Scholarship \$2,000 CAD
-driving simulation and multiple object tracking

2005 University of Waterloo Graduate Incentive Award \$20,000 CAD
-Multi-modal facilitation for visual search

2003 Natural Sciences and Engineering Council research award (Canada) \$8,000 CAD
-investigating memory advantages in synaesthesia

Supervision and Mentoring

Graduate Research Project Supervision:

2025 Parya Abadeh, Department of Computer Engineering, U of Guelph

2024 Xuye Liu, Department of Computer Science, University of Waterloo

2024 Shivam Baikerikar, Department of Computer Science, University of Guelph

Mentoring and Support of graduate students' research programs:

2017 – present **Vision & Attention Lab**
Department of Psychology, University of Waterloo

2015 - 2017 **Tasmanian Cognition Lab**
Department of Psychology, University of Tasmania
- PhD Student Bronwyn Harch

2008 - 2012 **Driving Research In Virtual Environments Lab**
Department of Psychology, University of Guelph

2006 - 2007 **Human Oriented Technology Lab; Aviation & Cognitive Engineering Lab,**
Department of Psychology, Carleton University

Undergraduate Research Theses:

2018 – 2019 Shouvojit Sarker, University of Tasmania
Title: **Methodology for Classifying Trust in Autonomous Systems**

2017 – 2018 Seth Siriya, University of Tasmania
Title: **Machine Learning using GSR for Measuring Cognitive Workload**

2016 – 2017 Liroy Lourenco, University of Tasmania
Title: **Development of a Workload Estimation Toolkit**

2016 – 2017 Maddy Cochrane, University of Tasmania
Title: **Development of a Mechatronics – Based Stroke Rehabilitation Platform**

2013 – 2014 Eduardo Avarez Gomez, University of Tasmania
Title: **Pupillometry-based analysis of a Rapid Serial Visual Presentation task**

Teaching

summary: 22 courses, 4 institutions, ~2400 students. Primary coursework in Research Methods, Applied Cognitive Psychology, Neuroscience, Artificial Intelligence, Human Computer Interaction / User Experience & Design

Please refer to [Teaching Dossier](#) for full list of courses taught.

Academic Awards and Honours

2018 *Best paper award*: Exploring Novel Methodology for Classifying Cognitive Workload.
INTETAIN 2018 Conference, Guimarães, Portugal.

2014 *CSSHREC Excellence in Research Ethics Award*
Commonwealth Scientific and Industrial Research Organization (CSIRO, Australia)

2014 *Best Paper Award*: Modelling Spatial Understanding.
International Academy, Research, and Industry Association (Italy)

2013 *Post-Doctoral Fellowship*: Cognitive Informatics / Autonomous Systems Division
Commonwealth Scientific and Industrial Research Organization (CSIRO, Australia)

2011 *College of Social and Applied Human Science: Dean's Scholarship*
University of Guelph

2010 *University of Guelph Board of Graduate Studies Research Scholarship*
University of Guelph

2010 *University of Waterloo Graduate Incentive Award*
University of Waterloo

2002 *NSERC Undergraduate Student Research Award*
University of Waterloo

Service to Scientific and Technical Community

Conference Session Chair

CogSci 2021: Trends in Cognitive Science (July 28, 2021)

Conference Committee Membership

CogSci 2023 Conference: Meta-Review Committee Member

CogSci 2022 Conference: Meta-Review Committee Member

CogSci 2021 Conference: Meta-Review Committee Member

CogSci 2020 Conference: Meta-Review Committee Member

Ad-hoc Reviewing

Research and Practice in Technology Enhanced Learning
Human Factors and Ergonomics Society
Human Factors and Ergonomics Society of Australia
Cambridge Journal of Navigation
INTETAIN 2020

Professional Affiliations

Psychonomics Society
Association for Computing Machinery (ACM)
Human Factors and Ergonomics Society (HFES)
Cognitive Science Society
World Conference on Transportation Research Society (WCTRS)

Other certifications related to applied work

2017 Mining Operations Safety Training
2016 Sea-Farer's Basic First Aid Course
2016 Project Management Fundamentals program

Federal security clearances granted for sensitive project work

2024 RCMP / Australian Federal Police
2022 RCMP / Australian Federal Police
2016 Australian Federal Police
2006 Transport Canada
2001 Transport Canada
1999 Royal Canadian Mounted Police

Research Impact

- Research work at eSentire labs resulted in early (2023) deployment of internal LLM security gateway, across 48 departments and ~750 employees. Oversaw initial deployment of LLM gateway in SOC. Produced anonymized dataset for analysis by CSIRO.
- Research contributions at Transport Canada, Ergonomics and Crash Avoidance fed directly into legislation on Hands-Free requirements for cell phone use while driving in Canada; subsequent work on benchmarking in-vehicle entertainment / navigation systems was also used by Cdn government.
- Research activity with Australian Maritime College contributed to safety testing of incoming Remote Pilotage hardware at Port of Melbourne
- Automation, Trust and Workload project at CSIRO lasted two years, and the focus on trust in automation kicked off a long running program on trust and collaborative intelligence which is still

functioning in 2025, and interestingly, has begun to address issues in cybersecurity;
<https://research.csiro.au/cintel/projects/projects/trust-in-cintel/>

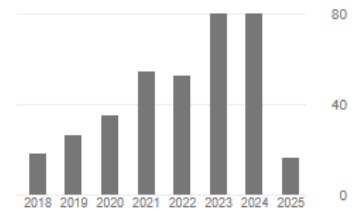
- 461 research citations across 21 publications, over 15 years, with my research having impact in design, psychology, engineering, computer science, and other research domains.

PUBLICATIONS

Summary: 21 peer-reviewed journal articles, 6 conference talks, 10 posters, 2 book chapters, 1 technical report, 1 invited speaking engagement, 1 media engagement, 3 research theses.

Citation Record: 461 Citations, H-Index (9)

https://scholar.google.com.au/citations?hl=en&user=j1MflwoAAAAJ&view_op=list_works&sortby=pubdate



Manuscripts in Preparation

Lochner, M. Flattening the 'Inverted U': Violations of the stress-performance curve. Submitting to *JEP: Human Perception and Performance*

Lochner, M., Smilek, D. Does the Flashed Faces effect rely on perceptual averaging? Submitting to *Attention, Perception & Psychophysics*

Manuscripts complete - Pending Submission

Lochner, M. Topic Modelling of Large Language Model use in Live Cybersecurity Operations. Submitting to *Journal of Cybersecurity*.

Lochner, M., Duenser, A., Siriya, S., and Heathcote, A. Validating GSR as a measure of Cognitive Workload. Submitting to *Psychological Methods*

Peer reviewed full articles

Lochner, M., & Smilek, D. (2023). The uncertain advisor: trust, accuracy, and self-correction in an automated decision support system. *Cognitive Processing*, 24(1), 95-106.

- Kunal, G., Hajika, R., Pai, Y.S., Duenser, A., Lochner, M., Billinghurst, M. (2020). Measuring Human Trust in a Virtual Assistant using Physiological Sensing in Virtual Reality. *IEEE VR*, March 22-26, 2020. Atlanta, USA.
- Gupta, K., Hajika, R., Pai, Y., Duesner, A., Lochner, M., Billinghurst, M. (2019). In AI We Trust: Investigating the Relationship between Biosignals, Trust and Cognitive Load in VR. *25th ACM Symposium on Virtual Reality Software and Technology (VRST 2019)*, Nov. 12-15, 2019. Sydney, Australia.
- Lochner, M., Duenser, A., Sarker, S. (2019). Trust and Cognitive Load in semi-automated UAV operation. *Australian Conference on Computer-Human Interaction (OZCHI 2019)*, Dec 3-5, 2019. Perth, Australia.
- Rozado, D., Lochner, M., Engelke, U., & Dünser, A. (2019). Detecting intention through motor-imagery-triggered pupil dilations. *Human-Computer Interaction*, 34(1), 83-113.
- Lochner, M., Duenser, A., Lutzhoft, M., Brooks, B., & Rozado, D. (2018). Analysis of maritime team workload and communication dynamics in standard and emergency scenarios. *Journal of Shipping and Trade*, 3(1), 2.
- Siriya, S., Lochner, M., Duenser, A., Taib, R. (2018). Exploring Novel Methodology for Classifying Cognitive Workload. *INTETAIN 2018*, Guimarães, Portugal, November 21-23, 2018. *Received Best Paper Award*.
- Rozado, D.; Lochner, M. (2017). Fast Human-Computer Interaction Through Gaze and Face Gestures. *IEEE Transactions on Accessible Computing*, 10, 3, Article 10.
- Lochner, M.J., Trick, L. M. (2016). Tracking road vehicles in heterogenous vs homogenous colour sets. *Australasian Road Safety Conference*, Canberra, Australia, September 6-8, 2016.
- Lochner, M.J., Duenser, A., Brooks, B., Lutzhoft, M., Rozado, D. (2016). "Analysis of maritime team workload and communication dynamics in standard and emergency scenarios". Paper presented at *World Conference on Transportation Research*, Shanghai, July 10 – 15, 2016.
- Duenser, A, Rozado, D, Howell, B, Rosolen, G, Callisaya, M, Lochner, M, and Cochrane, M (2016), Development of a low cost upper limb rehabilitation system using BCI, eye-tracking and direct visual feedback. *Proc. 11th Intl Conf. on Disability, Virtual Reality and Assoc. Technologies*, PM Sharkey, AA Rizzo (Eds), pp. 291–294, Los Angeles, California, USA, 20–22 Sept. 2016.
- Duenser, A., Lochner, M., Engelke, U., & Fernandez, D. R. (2015). Visual and Manual Control for Human-Robot Teleoperation. *IEEE Computer Graphics and Applications*, 35(3), 22–32.
- Lochner, M. J., Trick, L. M. (2015). The Effects of Task Load and Vehicle Heterogeneity on Performance in the Multiple Vehicle Tracking Task. *8th International Symposium on Human*

Factors in Driving Assessment, Training, and Vehicle Design. Salt Lake City, Utah. Iowa City, IA: University of Iowa Public Policy Centre.

Lochner, M. J., and Trick, L. M. (2014). Multiple-Object Tracking While Driving: The Multiple-Vehicle Tracking Task. *Attention, Perception, & Psychophysics*, 76(8): 2326—2345, June 2014.

Lochner, M. J., Sennersten, C., Morshed, A., & Lindley, C. (2014). Modelling Spatial Understanding: Using Knowledge Representation to Enable Spatial Awareness and Symbol Grounding in a Robotics Platform. *International Journal On Advances in Intelligent Systems*, v 7 n 3&4 2014.

Sennersten, C., Morshed, A., Lochner, M. & Lindley, C. (2014). Towards a Cloud-based Architecture for 3D Object Comprehension in Cognitive Robotics. *6th international conference on advanced cognitive technologies and applications*, Mestre, Italy.

Duenser, A., Abramovici, D., Obaid, M., Lochner, M. (2014). Towards reactive augmented reality exposure treatment. Paper presented at *8th International Conference on Pervasive Computing Technologies for Healthcare*, Oldenburg, Germany.

Lochner, M. J., Trick, L. M. (2011). Attentional Tracking of Multiple Vehicles in a Highway Driving Scenario. *Proceedings of the 6th International Symposium on Human Factors in Driving Assessment, Training, and Vehicle Design*. Lake Tahoe, California. Iowa City, IA: University of Iowa Public Policy Centre, USA. June 27-30, 2011.

Trick, L.M., Lochner, M., Toxopeus, R., & Wilson, D. (2009). Manipulating drive characteristics to study the effect of mental load on older and younger drivers. *Proceedings of the 5th International Symposium on Human Factors in Driving Assessment, Training, and Vehicle Design*, Big Sky, Montana, USA. June 22-25, 2009.

Harbluk, J.L., Burns, P.C., Lochner, M., & Trbovich, P.L. (2007). Using the lane-change test (LCT) to assess distraction: Tests of visual-manual and speech-based operation of navigation system interfaces. *Proceedings of the Fourth International Driving Symposium on Human Factors in Driver Assessment, Training and Vehicle Design*, Stevenson, Washington, USA. July 9-12, 2007.

Conference Talks

Lochner, M.J., Trick, L. M. 2016. Tracking road vehicles in heterogenous vs homogenous colour sets. *Australasian Road Safety Conference*, Canberra, Australia. September 6-8, 2016.

Lochner, M.J., Duenser, A., Brooks, B., Lutzhoft, M., Rozado, D. (2016). Analysis of maritime team workload and communication dynamics in standard and emergency scenarios. *World Conference on Transportation Research*, Shanghai, July 10 – 15, 2016.

Lochner, M., Sennersten, C., Morshed, A. & Lindley, C. (2014). Modelling Spatial Understanding: Using knowledge representation to enable spatial awareness in a robotics platform. Presentation for the *6th international conference on advanced cognitive technologies and applications*, Mestre, Italy.

Lochner, M., Mueller, A., Reed-Jones, J., Reed-Jones, R., & Toxopeus, R. (2010). DRIVE lab studies. Presented at *APMA-Auto21 Annual Conference and Exhibition* in Windsor, Ontario: June, 2010.

Trick, L.M., Lochner, M., Toxopeus, R., & Wilson, D. (2009). Manipulating drive characteristics to study the effect of mental load on older and younger drivers. Proceedings of the *5th International Symposium on Human Factors in Driving Assessment, Training, and Vehicle Design*, Big Sky, Montana, USA: June, 2009.

Burns, P., Harbluk, J., Trbovich, P. & Lochner, M. (2006). Evaluating Tasks with the LCT. Presented at the *Driver Metrics Workshop*, Transport Canada, Ottawa, Ontario. October 2-3 2006.

Conference Posters (external - refereed)

Lochner, M., Smilek, D., Li, S. (2020) Effects of Accuracy and Uncertainty on Trust in an Automated Decision Support System. Poster presented at the Lake Ontario Visionary Establishment, Niagara Falls, January 2020.

Lochner, M. J., Duenser, A., Siriya, S., Heathcote, A. Validating Galvanic Skin Response as a Measure of Cognitive Workload. (2019). Poster presented at *60th Annual Meeting of the Psychonomic Society (Psychonomics)*, Nov. 14-17, 2019. Montreal, Canada.

Lochner, M. J., Trick, L. M. 2015. The Effects of Task Load and Vehicle Heterogeneity on Performance in the Multiple Vehicle Tracking Task. Presented at the *8th International Symposium on Human Factors in Driving Assessment, Training, and Vehicle Design*. Salt Lake City, Utah. Iowa City, IA: University of Iowa Public Policy Centre

Lochner, M. J., Trick, L. M. Attentional Tracking of Multiple Vehicles in a Highway Driving Scenario. Presented at *Driving Assessment 2011*, Lake Tahoe, Nevada.

Trick, L.; Lochner, M.; Toxopeus, R.; Wilson, D. Manipulating Drive Characteristics to Study the Effects of Mental Load on Older and Younger Drivers. *Driving Assessment 2009*, Big Sky, Montana: July 2009.

Lochner, M., Stolz, J. (June 2004) Cross-Modal Target Identification and Visual Search, Part I. Poster presented at the *14th Annual Brain, Behaviour & Cognitive Science (BBCS)* meeting, St. John's, Newfoundland.

Conference Posters (internal - Invited)

Lochner, M., Duenser, A., Engelke, U., Ngyuen, H., 2016. Cognitive Informatics Team: Project Summaries. Presented at the Data61 Inaugural event, 'D61+LIVE' at the Australian Technology Park, Sydney.

Lochner, M. J.; Mitchel, P. Plant Electrophysiology and Remote Sensing. Presented at the MPAS-DP Postdoctoral Conference at the Australian Synchrotron, Feb 9 – 11, 2015, Clayton, Victoria, Australia.

Duenser, Engelke, Lochner, Rozado, Roselin, Sennersten: E-science Platform for Cognitive Engineering. Presented at the annual CSIRO Computational Informatics conference, 2013.

Lochner, M. J. The effects of vector-specific background motion in a multiple object tracking task. Presented at University of Guelph, Neuroscience Day 2009.

Book Chapters

Siriya, S., Lochner, M., Duenser, A., Taib, R. (2019). Exploring Novel Methodology for Classifying Cognitive Workload. Paulo Cortez. *Intelligent Technologies for Interactive Entertainment*. (pp 105-114). Springer, Cham.

Duenser, A., Rozado, D., Rosolen, G., Howell, B., Callisaya, M., Lochner, M. (2017). The Development of a Low-Cost Upper Limb Rehabilitation System Using BCI, Eye-Tracking and Direct Visual Feedback. Powell, W., Sharkey, PM., Rizzo, A. *Virtual Reality: Recent Advances for Health and Wellbeing*. (pp. 1-10). 2017.

Technical Reports

Lochner, Martin; Duenser, Andreas; Reeson, Andrew. (2017). Automated Advice Systems for Financial Decision Making: Final report on experimental assessment carried out for the CSIRO / Monash superannuation cluster research project. 38. Commonwealth Sci & Indust Res Org.

Speaking Engagements - Invited

Panel Discussion Member – Cognitive Mechanisms and Machine-Brain Interaction (2014)
International Academy, Research, and Industry Association (IARIA, Italy)

Media Engagement

A. Reeson; A. Duenser; M. Lochner. Computer says no: robo-advice is growing but we still don't trust it. Article published in "The Conversation" online Academic website. Published August 3, 2017 4.16pm EDT. <https://theconversation.com/computer-says-no-robo-advice-is-growing-but-we-still-dont-trust-it-80751>

Research Theses

Lochner, Martin Jewell. (Ph.D. Thesis) 2012. Multiple Object Tracking and the Division of the Attentional Spotlight in a Realistic Tracking Environment. The University of Guelph.
<http://atrium.lib.uoguelph.ca:8080/xmlui/handle/10214/3237>.

Lochner, Martin Jewell. (M.A. Thesis) 2005. Auditory target identification in a visual search task. The University of Waterloo.
<https://uwspace.uwaterloo.ca/bitstream/handle/10012/755/mlochner2005.pdf?sequence=1>.

Lochner, Martin Jewell. (B.A. Honours Thesis) 2002. Synaesthesia and Memory: Does the presence of colour underlie memory advantages for items that elicit synaesthesia? The University of Waterloo.

Academic References

Dr. Martin Lochner

Selected (3)

Dr. Dan Smilek, Professor of Cognitive Psychology

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Prof. Dr. Christopher Lueg, Professor, Human Centred Design

University of Illinois Urbana-Champaign, School of Information Sciences
Bern University of Applied Sciences
501 E. Daniel St, Champaign, IL, 61820-6211,
Email: cplueg@illinois.edu

Dr. Andreas Duenser, Senior Research Scientist, Cognitive Informatics

Commonwealth Scientific and Industrial Research Organization, Decision Sciences
15 College Road, Sandy bay, Tasmania, Australia
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Reserve(4)

Dr. Richard Eibach, Associate Professor, Associate Chair Undergraduate Affairs

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Dr. Paulo De Souza, Head of School

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170 Kessels Road, Nathan Queensland, 4111, Australia
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E-mail: paulo.desouza@griffith.edu.au

Dr. Andrew Heathcote, Professor of Cognitive Psychology

University of Tasmania, Department of Psychology,
Churchill Avenue, Sandy Bay, Tasmania, Australia
Phone: +61 3 6226 1763
e-mail: andrew.heathcote@newcastle.edu.au

Dr. Lana Trick, Professor of Cognitive Neuroscience

University of Guelph, Department of Psychology
50 Stone Road East, Guelph, Ontario, N1G 2W1
Phone: (519) 824-4120 ext. 53518
e-mail: ltrick@uoguelph.ca