CURRICULUM VITA

Benjamin P. Richardson Ph.D.

Experis Human Factors Research at Microsoft

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EDUCATION

| Ph.D. | Experimental Psychology (2022) | |
|-------|---|--|
| | Washington State University, Pullman, Washington | |
| M.S. | Experimental Psychology (2015) | |
| | Central Washington University, Ellensburg, Washington | |
| B.A. | Experimental Psychology (2009) | |
| | Western Washington University, Bellingham, Washington | |

PROFESSIONAL POSITIONS

| 2023 - Current | Lead Human Factors Research Scientist |
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| | Microsoft Human Factors Research via Experis, Redmond, Washington |
| 2021 – 2023 | Senior Research Collaborator |
| | Meta Reality Labs Research via Tailored Management, Redmond, Washington |
| 2017-2021 | Cognitive Scientist / Experimental Psychologist |
| | Washington State University, Pullman, Washington |
| 2017-2021 | Psychology Instructor |
| | Washington State University, Pullman, Washington |
| 2015-2017 | Data Analyst III |
| | Central Washington University, Ellensburg, Washington |
| 2015 | Psychology Instructor |
| | Central Washington University, Des Moines, Washington |

ADDITIONAL POSITIONS

| 2017-2022 | Research Associate, Attention, Perception and Performance Laboratory |
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| | Washington State University, Pullman, Washington |
| 2017 | Teaching Assistant, Statistics in Psychology |
| | Washington State University, Pullman, Washington |
| 2013-2015 | Research Associate, Brain Dynamics and Cognitive Neuroscience Laboratory |
| | Central Washington University, Ellensburg, Washington |
| 2007-2009 | Research Assistant, Human Cognition and Neural Dynamics Laboratory |
| | Western Washington University, Bellingham, Washington |

AWARDS, HONORS, AND FELLOWSHIPS

| 2021 | WSU James F. Adams Endowment Grant - \$2,000 |
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| 2021 | WSU Graduate and Professional Student Association Dissertation Award - \$500 |
| 2020 | Psychonomic Society Graduate Conference Award - \$1,000 |
| 2020 | Marchionne Summer Research Fellowship Grant - \$5,000 |
| 2018 | Marchionne Summer Research Fellowship Grant - \$5,000 |
| 2017 | Washington State University Travel Grant - \$1,000 |
| 2015 | Outstanding Graduate Student of the Year, Central Washington University |

RESEARCH EXPERIENCE

| Fall 2023 – Current | Lead Human Factors Research Scientist in the Microsoft Human Factors Lab via Experis, |
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| | Redmond, Washington |
| Spring 2021 – Fall 2023 | Research Collaborator at Meta Reality Labs Research, Redmond, Washington |
| Fall 2017-2022 | Graduate Student Lab Manager for Dr. Lisa Fournier's Attention, Perception and |
| | Performance Behavioral Lab |
| | Washington State University, Pullman, Washington |
| Fall 2017-2022 | Graduate Student Lab Manager for Dr. Lisa Fournier's Adult Human Electrophysiology Lab |
| | Washington State University, Pullman, Washington |
| Fall 2013-Summer 2015 | Graduate Student Lab Manager for Dr. Ralf Greenwald's Brain Dynamics |
| | and Cognitive Neuroscience Lab |
| | Central Washington University, Ellensburg, Washington |
| Summer 2009-Spring 2012 | Undergraduate Lab Assistant for Dr. Kelly Jantzen's Human Cognition |
| | and Neural Dynamics Lab |
| | Western Washington University, Bellingham, Washington |

TECHNICAL/PROGRAMMING EXPERIENCE

| R | Data analysis and visualization. | |
|----------------------|---|--|
| Python/PsychoPy | Experiment design, data collection, data analysis | |
| MATLAB | Analyzing and visualization of electrophysiological data. | |
| E-Prime | Experiment design, data collection, data analysis | |
| BioSemi | Electrophysiology data collection. | |
| Neuroscan | Electrophysiology data collection. | |
| SQL | Databases joining and student admission data analysis. | |
| Microsoft Excel | Data shaping and visualization. | |
| Microsoft Access | Database joining and organization. | |
| Microsoft PowerPoint | Data visualization, presentation design. | |
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PEER REVIEWED JOURNAL PUBLICATIONS

- 1.) Fournier, L. R., Richardson, B. P., & Logan, G. D. (2022). Partial Repetition Costs are Reduced but not Eliminated with Practice. Journal of Cognition, 5(1-17). Doi: 10.5334/joc.230
- 2.) Fournier, L. R. & Richardson, B., (2021). Partial repetition between action plans delays responses to ideomotor compatible stimuli. Psychological Research, 1-15. Doi: 10.1007/s00426-021-01491-9
- 3.) Richardson, B., Pfister, R., & Fournier, L. R. (2020). Free-choice and forced-choice actions: Shared representations and conservation of cognitive effort. Attention, Perception, & Psychophysics, 82(5), 2516-2530. Doi: 10.3757/s13414-020-01986-4
- 4.) Jantzen, K. J., Seifert, M., Richardson, B., Behmer, L. P., Odell, C., Tripp, A., & Symons, L. A. (2012). Dorsal stream activity and connectivity associated with action priming of ambiguous apparent motion. NeuroImage, 63(2), 687-697. Doi: 10.1016/j.neuroimage.2012.07.010

MANUSCRIPTS IN PREPARATION

1.) Richardson, B., Lappin, J. & Fournier, L.R. Interrupting actions: Effects of shared action components and training on temporal response process

PUBLISHED ABSTRACTS/SUPPLEMENTS

- 1.) Richardson, B., & Fournier, L.R., 2018. Evidence of Shared Action Plan Representations Between Free Choice and Forced-Choice Tasks, Program, Neuroscience Meeting Planner. No. 2172, Society for Neuroscience, San Diego, CA.
- 2.) Fournier, L.R., Taddese, E. & Richardson, B., 2018. Action Plans for Forced-Choice and Free-Choice Responses Share the Same Representational Domain. The 3rd International Meeting of the Psychonomic Society, Amsterdam, North Holland.

INVITED PEER REVIEW MANUSCRIPT REVIEWS

1.) August 2021 – Journal of Cognition, by the European Society for Cognitive Psychology, Doi: 10.5334/joc.230.

INVITED PRESENTATIONS/TALKS

- 1.) ACTCON Summer Summit on Cognitive Control, Title: Are Free-Choice Biases to Avoid Competition Between Action Plans Related to Working Memory Capacity?, July 2021. Julius-Maximilians-Universität Würzburg, Sanderring, Würzburg, Bavaria.
- 2.) Current Issues in Psychology, PSYCH 506, Title: Shared Representation for Free and Forced Choice Action, October 2019. Washington State University, Pullman, Washington
- 3.) History of Psychology, PSYCH 401, Title: Psychophysics: The search for points of ambiguity, October 2019, Washington State University, Pullman, Washington

GRANTS FUNDED

| 2021 | Title: Washington State University Graduate and Professional Student Association Dissertation Grant. |
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| | Principal Investigator: Benjamin Richardson. Funding Agency: Washington State University Graduate |
| | and Professional Student Association. Requested/Funded: \$500 |
| 2020 | Title: Washington State University Marchionne Summer Research Fellowship Grant. Principal |
| | Investigator: Benjamin Richardson. Funding Agency: Washington State University Marchionne |
| | Foundation. Requested/Funded: \$5,000 |
| 2020 | Title: Washington State University Graduate & Professional Student Association Travel Grant. Principal |
| | Investigator: Benjamin Richardson. Funding Agency: Washington State University Graduate & |
| | Professional Student Association. Requested/Funded: \$698 |
| 2017 | Title: Washington State University Marchionne Summer Research Fellowship Grant. Principal |
| | Investigator: Benjamin Richardson. Funding Agency: Washington State University Marchionne |
| | Foundation. Requested/Funded: \$5,000 |
| 2017 | Title: Washington State University Graduate Travel Grant. Principal Investigator: Benjamin Richardson. |
| | Funding Agency: Washington State University Department of Psychology. Requested/Funded: \$1,000 |
| 2015 | Title: Summer Creative Research Grant. Principal Investigator: Benjamin Richardson. Funding Agency: |
| | Central Washington University. Requested/Funded: \$3,500 |
| 2015 | Title: Graduate Creative Research Grant. Principal Investigator: Benjamin Richardson. Funding Agency: |
| | Central Washington University. Requested/Funded: \$1,000 |
| 2015 | Title: Central Washington University Travel Grant. Principal Investigator: Benjamin Richardson. |
| | Funding Agency: Central Washington University. Requested/Funded: \$400 |

CONFERENCE PRESENTATIONS

- 1.) **Richardson, B.**, & Fournier, L.R. (2020, November). Partial Are Robust but Reduced After Extensive Stimulus-Response Practice, *Psychonomics Society Annual Meeting*, Online.
- 2.) **Richardson, B.**, & Fournier, L.R. (2019, November). Shared Action Representation for Free and Forced Choice Actions: Behavioral and Psychophysiological Evidence, *Psychonomics Society Annual Meeting*, Montreal, Quebec.
- 3.) **Richardson, B.**, & Fournier, L.R. (2018, November). Evidence of Shared Action Plan Representations Between Free Choice and Forced-Choice Tasks, *Society for Neuroscience*, San Diego, California.
- 4.) Fournier, L.R., Taddese, E. & **Richardson, B.** (2018, May). Action Plans for Forced-Choice and Free-Choice Responses Share the Same Representational Domain. *The 3rd International Meeting of the Psychonomic Society*, Amsterdam, North Holland.
- 5.) Penningroth, B., Broyan, V., Pope, L. & **Richardson, B.** (2017, May). Alpha Wave Comparison and Working Memory Function Between Musicians and Non-Musicians. *Central Washington University Symposium of University Research and Creative Expression*. Ellensburg, Washington.
- 6.) **Richardson, B.**, Greenwald, R., Felke, Z., Whorley, G., Williams, H. & Medrano, M. (2015, May). Reaction Times and Decision Making to Auditory Stimuli in Musicians and Non-Musicians. *Central Washington University*

- Symposium of University Research and Creative Expression. Ellensburg, Washington.
- 7.) **Richardson, B.**, Greenwald, R., Felke, Z., Whorley, G., Williams, H. & Medrano, M. (2015, May). Electrophysiological and Behavioral Working Memory Differences Between Musicians and Non-Musicians. *Central Washington University Symposium of University Research and Creative Expression*. Ellensburg, Washington.
- 8.) Ellis, D.M., Greenwald, R., **Richardson, B.**, Celori, A. F., Meador, C., Cherry, J. (2014, Spring). Impact of Video Games on Working Memory. *Central Washington University Symposium of University Research and Creative Expression*. Ellensburg, Washington.
- 9.) **Richardson, B.**, Ellis, D. M., Greenwald, R, Celori, A. F., Cherry, J., & Meador, C. (2014, Spring). Reaction Times and Decision Making in Video Gamers versus Non-Gamers and Between Genders. *The 94th Annual Conference of the Western Psychological Association*. Portland, Oregon.
- 10.) **Richardson, B.**, North, S., Symons, S., & Jantzen, K.J. (2007, Spring). Beta and Gamma Band Desynchronization Reflect the Perceptual Capture of Motion. *The Northwest Cognition and Memory Conference*. Bellingham, Washington.

TEACHING EXPERIENCE

| Summer 2020 | Statistics in Psychology (Psych 311) , Instructor of Record, undergraduate course, 30 students, Department of Psychology, Washington State University, Pullman, Washington |
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| Spring 2018- Spring 2021 | Introduction to Psychology (Psych 105), Instructor of Record, undergraduate course, ~130 students, Department of Psychology, Washington State University, Pullman, Washington |
| Summer 2019 | Biopsychological Effects of Drugs and Alcohol (Psych 265) , Instructor of Record, undergraduate course, 20 students, Department of Psychology, Washington State University, Pullman, Washington |
| Fall 2017 | Statistics in Psychology (Psych 311) , Lab Graduate Teaching Assistant, undergraduate course, 30, students, Department of Psychology, Washington State University, Pullman, Washington |

ACADEMIC WORKSHOPS

- 1.) ACTCON Summer Module Course on Cognitive Control, July, 2021, Online and hosted from Julius-Maximilians-Universität Würzburg, Sanderring, Würzburg, Bavaria.
- 2.) EEGLAB workshop on advanced electrophysiological data analysis, March, 2018, University of California, San Diego, San Diego, California.

PROFESSIONAL SOCIETY AFFILIATIONS

- 1) The Psychonomic Society
- 2) Society for Neuroscience
- 3) American Psychological Association

PROFESSIONAL SERVICE

- 1.) Graduate Student Representative for Experimental Psychology Faculty Committee, (2020-2021). Washington State University, Pullman, Washington.
- 2.) Graduate Student Representative for Central Washington University New Faculty Hiring Committee. (2015). Central Washington University, Ellensburg, Washington.