

# THOMAS E. GORMAN | CV

Cognitive Scientist

Department of Psychological and Brain Sciences  
1101 E. 10th St.  
Bloomington, IN 47405

🌐 [tegorman13@github.io](mailto:tegorman13@github.io)  
🔗 [tegorman13](https://github.com/tegorman13)  
✉️ [tegorman@iu.edu](mailto:tegorman@iu.edu)

---

## Education

2017 - May 2024

### University of Indiana - Bloomington

PhD in Psychology and Cognitive Science

Dissertation: *The Role of Variability in Learning Generalization: A Computational Modeling Approach*

2011 - 2015

### University of Wisconsin Madison

B.Sc. in Psychology

Thesis: *Short-term mindfulness intervention reduces the negative attentional effects associated with heavy media multitasking*

---

## Experience

### Percepts and Concepts Lab

- PhD Student (2017 - Present)
- Principal Investigator: Robert Goldstone, PhD

### Learning and Transfer Lab (University of Wisconsin-Madison)

- Lab Manager / Research Coordinator (2015-2017)
- Undergraduate Research Assistant (2013 - May 2015)
- Principal Investigator: C. Shawn Green, PhD

### Alexander Lab – Medical Physics (University of Wisconsin-Madison)

- Research Coordinator (2015 – 2017)
- Principal Investigator: Andrew Alexander, PhD

### Center for Healthy Minds (University of Wisconsin-Madison)

- Undergraduate Research Assistant (January 2014 - May 2015)
- Principal Investigator: Richard J. Davidson, PhD

## Skills

Category	Skills
Programming	<ul style="list-style-type: none"><li>- R (Quarto, Rmarkdown, Shiny )</li><li>- JavaScript</li><li>- Python (jupyter, torch, tensorflow)</li><li>- Bash (Shell scripting, Workflow automation)</li><li>- MATLAB (psychtoolbox)</li></ul>
Computational Modeling	<ul style="list-style-type: none"><li>- Artificial Neural Networks</li><li>- Bayesian Statistics</li><li>- Mixed Effect Models</li><li>- Dimensionality Reduction &amp; Similarity Scaling</li><li>- Approximate Bayesian Computation</li><li>- Individual Differences</li></ul>
Data Analysis	<ul style="list-style-type: none"><li>- Multilevel Modeling</li><li>- Bayesian Statistics</li><li>- ANOVA; t-test; regression</li><li>- Mixed Effects Models</li><li>- Dimensionality Reduction</li></ul>
Experimental Skills	<ul style="list-style-type: none"><li>- Behavioral Tasks</li><li>- Online Data Collection (jsPsych for web-based experiments)</li><li>- Survey Data Collection (Qualtrics)</li><li>- Mechanical Turk</li><li>- MRI &amp; EEG</li></ul>
Workflow Automation & Version Control	<ul style="list-style-type: none"><li>- Multi-language workflows (integrating R, Bash, Python)</li><li>- Git (Documentation, backup, branching, collaboration)</li></ul>
Tools	<ul style="list-style-type: none"><li>- RStudio</li><li>- VS Code</li><li>- Vim/Neovim</li></ul>
Miscellaneous Skills	<ul style="list-style-type: none"><li>- Web Scraping</li><li>- SQL</li><li>- Website Design</li></ul>

## Journal Articles and Conference Proceedings

- **Gorman**, T. E., & Goldstone, R. L. (in progress). Impact of Training Variability on Visuomotor Function Learning and Extrapolation. [link](#)
- **Gorman**, T. E., & Goldstone, R. L. (2022). An instance-based model account of the benefits of varied practice in visuomotor skill. *Cognitive Psychology*, 137, 101491.
- Bazyldo, A., Kecskemeti, S., Cochrane, A., **Gorman**, T., Rokers, B., Dean, D., Green, C. S., & Alexander, A. L. (2021). Assessment of R1 Relaxometry Changes Induced via Repeated Videogame Training as a Measure of Neuroplasticity in College-aged Brains. In Proceedings of the ISMRM & SMRT Annual Meeting & Exhibition. An Online Experience. [link](#)
- Patrick, A., Dean, D., **Gorman**, T., Green, C. S., & Alexander, A. (2019). Assessment of Microstructural Changes Induced via Repeated Videogame Training as a Measure of Neuroplasticity in Normal Developing, College-age Brains. In Proceedings of the 27th Annual Meeting & Exhibition of the International Society for Magnetic Resonance in Medicine. Montréal, QC, Canada. [link](#)
- Dean, C. D., Patrick, A. M., **Gorman**, T., Green, C. S., & Alexander, A. L. (2018). Neuroplastic Changes of Myelin Microstructure With Video Game Play. In Proceedings of the Joint Annual Meeting ISMRM-ESMRMB. Paris, France. [link](#)

- Kattner, F., Cochrane, A., Cox, C. R., **Gorman**, T. E., & Green, C. S. (2017). Perceptual learning generalization from sequential perceptual training as a change in learning rate. *Current Biology*, 27(6), 840-846.
- **Gorman**, T.E., & Green, C.S. (2016). Short-term mindfulness intervention reduces the negative attentional effects associated with heavy media multitasking. *Scientific Reports*, 6.

## Reviews and Book Chapters

---

- **Gorman**, T.E., Gentile, D.A., & Green, C.S. Problem gaming: a short primer (2018). *American Journal of Play*, 10 (3), 309-327
- **Gorman**, T.E., & Green, C.S. (2017). Young minds on video games. In *Cognitive development in digital contexts*. 121-143. Academic Press.
- Green, C. S., **Gorman**, T., & Bavelier, D. (2016). Action Video-Game Training and Its Effects on Perception and Attentional Control. In *Cognitive Training* (pp. 107-116). Springer International Publishing.

## Presentations

---

- Half Day Tutorial on Measuring Mindfulness Behaviorally: Onsite/Online Data Collection with jsPsych
  - Cognitive Science Conference – 2018
- Does interleaving go the distance? Exploring the effect of dissimilarity on interleaved category learning
  - Math Psych/ICCM 2018
- Short term mindfulness intervention reduces cognitive deficits in heavy media multi-taskers
  - Undergraduate Research Symposium – UW-Madison – April 16th, 2015

## Awards

---

IU-Bloomington – Development Training Grant – beginning Fall 2019  
 IU-Bloomington - Steinmetz Summer Research Award - 2018  
 UW-Madison - Undergraduate Research Scholar Award – 2015  
 UW-Madison - Hilldale Undergraduate/Faculty Research Fellowship – 2014

## Ad-hoc Reviewer

---

Cognitive Science  
 Journal of Experimental Psychology: General  
 Journal of Experimental Psychology: Human Perception and Performance  
 Contemporary Educational Psychology

## Conferences

---

Cognitive Science Conference - 2021  
 Cognitive Science Conference - 2018  
 Mathematical Psychology & ICCM 2018  
 Boston Meeting on Methods in Cognitive Training (NSF Sponsored) – May 2017