**Evan Anderson**

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Education

**University of Illinois, Urbana-Champaign** (2016 - )

PhD, Neuroscience (PI: A.K. Barbey)

**Research Interests**

* Neurobiological basis of intelligence and higher cognitive functions
* Mathematical and statistical methods for the analysis of biomedical data
* Clinical and translational applications of neuroscience research

**Skills**

* Statistical programming in R, MATLAB, SPSS, Mplus, BUGS, Python
* Multimodal neuroimaging data collection and analysis
* Bayesian modeling, statistical learning and artificial intelligence
* High-performance and distributed computing

**University of Illinois, Urbana-Champaign** (2015)

Bachelor of Science, Psychology (Music Minor)

**Coursework**

* Focus on cognitive science, neurology, and computational modeling

**Achievements**

* Undergraduate GPA: 3.93
* Graduate GPA: 4.00

Experience

**DARPA TAILOR Program (AI NEXT)** (Summer 2020 - Fall 2020)

* Deployed and extended third wave AI methods for counterfactual forecasting in arbitrary (novel) intervention-trial datasets

**DARPA TAILOR Program (AI NEXT)** (Fall 2019 - Spring 2020)

* Designed and implemented third wave AI methods for studying individual differences in human performance in response to interventions

**Biomedical Imaging Center, UIUC** (Summer 2019)

* Implemented large-scale HPC pipeline for reproducible neuroimaging analysis
* Developed cluster computing expertise using Slurm, Lustre, bash, and BOINC

**Student Instructor, Psychology 100, UIUC** (three semesters; 2018-2019)

* Administered and taught large introductory undergraduate courses
* Solely responsible for designing and presenting all course lectures and material
* 150+ hours of lecturing and classroom experience

**Lab Manager, IARPA SHARP (INSIGHT) UIUC** (PI: A.K. Barbey; 2016 - 2017)

* Helped to implement and administer a complex 500 subject neuroscience intervention RCT
* Collected, managed, and processed large behavioral datasets
* Conducted inferential statistical analyses using large multivariate data
* Aided in preparing and writing monthly and final reports for funding agency
* Developed expertise in collecting, modeling, and analyzing neuroimaging data

**Research Assistant, Visual Attention Laboratory, UIUC** (PI: A. Lleras; 2014-2015)

* Performed extensive human subject research and data collection
* Experience with common research paradigms in visual perception
* Experience overseeing research projects from conception to completion
* Independent design and data collection on research projects

**Senior Research Assistant, Department of Computer Science, UIUC**

* Assisted in data collection and analysis on a large research project
* Independent and self-directed scheduling and study administration
* Recruited and interacted with a diverse community subject pool
* Ensured study compliance with university research guidelines

Reviewer Experience

* Nature Human Behavior
* Nature Scientific Reports
* Journal of Intelligence
* Proceedings of the National Academy of Sciences

Presentations

* 12/2017 – Keynote speaker, IEEE Brainhack Boston

Posters

* CNS 2020 – Individual differences in personality traits and meta-traits are associated with features of intrinsic brain networks. Matthew Moore, Grace J. Goodwin, **Evan D. Anderson**, Chris Zwilling, Tanveer Talukdar, Charles H. Hillman, Neal J. Cohen, Arthur F. Kramer, & Aron K. Barbey
* SFN Global Connectome 2021 – Investigating the Effects of Sport-Related Concussion on Structural Brain Connectivity: Evidence for Altered Local and Global Network Efficiency During Acute Symptom Management. **Evan D. Anderson**, Douglas Schultz, Yingying Wang, Elliot Carlson, Lonnie Albers, Julie Tuttle, Mark Mayer, Maital Neta, Cary R. Savage, Aron K. Barbey

Manuscripts and Publications

* **Anderson, ED**, Barbey, AK. (2020). Moral Reasoning: A Network Neuroscience Perspective. *The Cambridge Handbook of Imagination.* Cambridge University Press.
* **Anderson ED**, Schulz D, Wang Y, Carlson E, Albers L, Tuttle J, Mayer M, Neta M, Savage CR, Barbey AK. In Progress. Investigating the effects of sports-related concussion on structural brain connectivity: Evidence for the role of local and global network efficiency in injury assessment, symptom management, and return to play.
* **Anderson ED**, Barbey AK. In Progress. Investigating the Structural Brain Network Controllability of Intelligence.
* Pindus, DM, Zwilling, CE, Jarrett, JS, Talukdar, T, Schwarb, H, **Anderson, ED**, Cohen, NJ, Barbey, AK, Kramer, AF, & Hillman, CH (2020). Opposing associations between sedentary time and decision-making competence in young adults revealed by functional connectivity in the dorsal attention network. Nature Scientific Reports
* Talukdar T, Goodwin G, Di Pietro V, **Anderson ED**, Zwilling CE, Davies D, Belli A, Barbey AK. Forthcoming. Examining Blood Oxygen Level-Dependent (BOLD) Signal Variability in Sports-Related Concussion.
* Zwilling CE, Strang A, **Anderson E**, Jennifer Jurcsisn J, Johnson E, Das T, Kuchan MJ, Barbey, AK. (2020). Enhanced Physical and Cognitive Performance in Active Duty Airmen: Evidence from a Randomized Multimodal Physical Fitness and Nutritional Intervention. Nature Scientific Reports

Awards and Honors

* Spring 2019 - List of Teachers Ranked as Excellent By Their Students
* Fall 2018 - List of Teachers Ranked as Excellent By Their Students