CURRICULUM VITAE

Andrea Stocco, Ph.D. Department of Psychology and Institute for Learning and Brain Sciences University of Washington, Seattle, WA, 98195

Education

04/2005 Ph. D. in Psychology, University of Trieste, Italy,

11/2001 "Laurea" (equivalent to M. S.) in Communication Sciences, University of Trieste, Italy.

Academic Positions

09/2019 — Present Associate Professor, Department of Psychology, University of Washington

09/2019 — Present Adjunct Associate Professor, Paul G. Allen School of Computer Science and Engineering

06/2015 - 09/2019Assistant Professor, Department of Psychology, University of Washington

07/2012 — 05/2015 Research Assistant Professor, Department of Psychology, University of Washington

Research Scientist, Institute for Language and Brain Sciences, University of Washington. 09/2010 — 06/2012

01/2009 - 09/2010Research Faculty, Department of Psychology, Carnegie Mellon University

Postdoctoral Research Associate, Department of Psychiatry, University of Pittsburgh School 09/2008 - 12/2008

of Medicine

09/2005 — 09/2008 Postdoctoral Research Fellow, Department of Psychology, Carnegie Mellon University

Professional Memberships

Cognitive Science Society, Cognitive Neuroscience Society, Association for the Advancement of Artificial Intelligence (AAAI), Biologically Inspired Cognitive Architectures Society (BICA).

Professional Services

Founder Biologically Inspired Cognitive Architectures Society

Director Biologically Inspired Cognitive Architectures Society (2010-2011)

Artificial Intelligence, Behavioral and Brain Functions, Cerebral Cortex, Cognition, Cognitive Reviewer:

> Science, Biologically Inspired Cognitive Architectures, Cortex, Journal of Artificial General Intelligence, Journal of Cognitive Neuroscience, Journal of Cognitive Systems Research; Neuropsychologia, NeuroImage, Proceedings of the National Academy of Sciences, Psychological

Review, PloS Computational Biology, PLoS ONE.

Action Editor: Journal of Cognitive Systems Research (2007)

International Conference on Cognitive Modeling (2006), Twelfth ACT-R Workshop, Trieste, Italy **Organizer:**

(2005).

Panel Reviewer: National Science Foundation (2017-2018).

Department Service

2019-present: Graduate Recruitment Committee: Overseeing the policy and coordinating the recruitment of incoming

graduate students.

2017-present: Psychology Research Pool Supervisor. Overseeing size and class accreditation for PRP, managed the

graduate students in charge of the PRP, began developing new system to expand PRP to other

departments.

2015-2017: Graduate Teaching Award Committee.

Awards and Honors

Plenary Speaker, American Association for Artificial Intelligence (AAAI) Fall Symposium, Washington, D.C., 2017 November 8-10, 2017.

Invited Speaker, 26th Ernst Strüngmann Forum, Frankfurt, Germany, May 21-26th, 2017. 2017

- 2014 "Open Friuli" prize, given to Friulian emigrants who distinguished themselves internationally.
- 2012 Invited Faculty, International College, Spring 2012 (IK2012).
- 2009 Brain Imaging Research Center (BIRC) Young Investigator Pilot Study Award, Carnegie Mellon University, Pittsburgh, PA.
- Graduate fellowship at the University of Trieste (€80,000 over three years, awarded to the graduate student who qualified at the top of the class).
- 2001 University of Trieste, Trieste, Italy: "Dignita' di stampa" (rarely conceded only to outstanding research dissertations)

Selected Media Coverage

- 2016 "Brain-to-Brain Communication Is Closer Than You Think", *Popular Mechanics*, June 7, 2016, http://www.popularmechanics.com/science/a21220/brain-brain-communication
 - "I'm creating telepathy technology to get brains talking", *New Scientist*, March 2nd, 2016, https://goo.gl/eYXiL7
- 2014 "Learning a second language trains your brain for math", *Pacific Standard*, September 28, 2014, http://goo.gl/fbcm8P
 - "Mind meld? Scientist uses his brain to control another guy's finger", NBC, August 27, 2013, goo.gl/M7p4nL
 - "Researcher remotely controls colleague's body with brain", USA Today, August 27, 2013 (Front page, A1), goo.gl/ANpWQR
 - "Mind Melds Made Real" (#13 in the Top 100 science stories of the year), *Discover Magazine*, Jan/Feb 2014, http://goo.gl/57xSKQ
 - "Mind melds" (#6 on the "Top 10 ideas to change the world") CNN, http://goo.gl/YWdUP0
 - "The Human Brain-to-Brain Interface" (#1 in the list of "Top 5 Neuroscience Breakthroughs of the Year"), The Connectome, http://goo.gl/LHpT2o

Patents

Stocco, A. Losey, D. M., M., Abernethy, J. A., & Rao, R. P. N. Sensory Input Through Non-Invasive Brain Stimulation. US Patent 20170113056.

Current Support

- **2019-2021** (PI) Air Force Office of Scientific Research (AFOSR), award FA9550-19-1-0299 "Testing a Common Model for Human and Human-Like Intelligence".
- **2018-2022** (co-PI). Defense Advanced Research Project Agency, (DARPA), award FA8650-18-C-7826, "[In] Cognitio Veritas: Neural and Cognitive First Principles as Ground Truth for Social Simulation".
- **2017-2021** (co-PI) National Science Foundation (NSF), award BCS-1734430 "Collaborative Research: Relationship of Cortical Field Anatomy to Network Vulnerability and Behavior".
- 2017-2022 (co-PI) National Institutes of Health (NIH), award R01 NS099199-01 "Intrinsic Activity and Cognition in Parkinson Disease Assessed by Simultaneous fMRI/EEG".

Selected Invited Talks

- *Exploring Cognitive Architectures in the Era of Large Brain Data.* Virtual International Symposium on Cognitive Architecture (VISCA 2020), University of Michigan, June 5^{th.}
- 2020 The Algorithms That Rule Our Minds. Open Mic Science Cafe, Bainbridge Island, February 4th
- 2019 Effective Connectivity Analysis. Centre for Research on Brain, Language & Music, McGill University, Montreal, CA.
- 2018 Closed-loop Non-invasive Brain-to-brain Interfaces. Keynote speaker at fifth annual NeuroFutures conference, Seattle, WA, June 28th.
- 2017 The Standard Model of the Mind. Plenary speaker at the Fall Symposium of the Association for the Advancement of Artificial Intelligence (AAAI), Washington, DC, November 9^{th.}
- *Individual Differences in Reinforcement Learning Predict Higher-Level Cognitive Functions.* University of Victoria, BC, Canada, November 17^{th.}

- 2016 Implications of dynamic causal modeling analysis of fMRI data, Third Post-Graduate ACT-R Summer School, Lancaster, PA, August 7.
 - Basal ganglia neurodynamics in language and executive functions, Goethe University, Frankfurt, Germany, April 11th.
 - The gate and its gatekeeper: Basal ganglia neurodynamics and their implications for models of higher-level cognition, University of Groningen, The Netherlands, April 8.
- 2015 The Development of Brain to Brain Interfaces, Institute for the Future (IFTF), Palo Alto, October 22, .
 The Neural Bases of Symbolic Computations, Arizona State University, February 19
 The Neural Bases of Human Symbol Manipulation, University of Washington, January 21st,
- 2014 Brain to Brain Communication: Lessons Learned, Harvard Medical School, Boston, MA, December 1st. Symbolic References in the Brain, Google, Inc., Mountain View, CA, April 8.
- How the Brain Programs Itself: The Neuroscience of Rapid Behavior Reconfiguration, Institute of Cognitive Science, University of Colorado, Boulder, December 6.
 - Channeling the Flow of Information, University of Bangor, Wales, UK, April 23.
- 2012 *Bilingual Brain Training*, Department of Psychology, University of Hawaii at Manoa, Honolulu, HI, April 17.
 - Response Variability in Learning and Decision Making, Department of Artificial Intelligence, University of Groningen, March 23.
 - Cognitive Control and the Programmability of Human Behavior, Heymans Lecture, University of Groningen, the Netherlands, March 22
 - *The Basal Ganglia and Cognitive Flexibility*, series of four lectures given at the International College 2012 (IK2012), Guenne, Germany, March 16-23.
 - *Understanding Brain Function Through Computational Modeling: The Case of the Basal Ganglia*, Center for Statistics and Social Sciences, University of Washington, February 29.
- 2010 Computational and Neural Mechanisms for Flexible Behavior. Department of Artificial Intelligence, University of Groningen, The Netherlands, April 16.
- 2009 Integrated Cognitive Architectures for Robust Decision Making. Department of Psychology, University of Colorado at Boulder, Boulder, CO, July 9.