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### Education and training

- 2019-2020 University of Michigan, Ann Arbor
- Professional development leave (sabbatical)
  - The Soar cognitive architecture and the Common Model of cognition
- July 2012 Max Planck Institute for Human Development, Berlin, Germany
- Summer Institute on Bounded Rationality – Foundations of an Interdisciplinary Decision Theory
- 2006-2009 Carnegie Mellon University, Psychology Department
- Post-doctoral training in Cognitive Neuroscience and
  - Computational Cognitive Modeling
- Aug 2008 University of Michigan, Functional MRI Lab
- Summer course in fMRI
- 2002-2006 Utrecht University, Institute of Information and Computing Sciences
- Top tier university in Europe
  - Ph.D. in Information Science
  - Emphasis in Cognitive Modeling and Human-Computer Interaction
  - Dissertation: “Development of a cognitive model for navigating the Web”
- 1990-1995 University of Bucharest, Psychology Department
- Combined Bachelor’s and Master’s degree in Psychology
  - Emphasis in Cognitive Science and Human Factors
  - Minor in Mathematics and Computer Science
  - Thesis: “Psychological analysis of railway events”

### Research experience (see list of publications on page 10)

- 2018- Wright State University, Department of Psychology
- Associate Professor
  - Strategic thinking and executive control of cognition and affect
- 2012-2018 Wright State University, Department of Psychology
- Assistant Professor
  - Strategic thinking and executive control of cognition and affect

- 2010-2012 Carnegie Mellon University, Psychology Department
- Research Psychologist
  - Behavioral Game Theory and Cognitive Modeling
- 2006-2009 Carnegie Mellon University, Psychology Department
- Post-Doctoral Research Associate
  - ACT-R theory: Modeling and Experimentation
- 2002-2006 Utrecht University, Institute of Information and Computing Sciences
- Research Assistant
  - Cognitive Modeling and Human-Computer Interaction
  - Coordinated research internships of under/graduate students
- 1998-2002 Romanian Academy, Institute of Psychology, Bucharest
- Research Assistant and Research Scientist
  - Cognitive Psychology and E-learning

### Teaching experience

- 2013- Wright State University, Department of Psychology  
Human Factors & Industrial/Organizational Psychology Ph.D. Program
- PSY9030: Computational cognitive modeling – graduate
  - PSY7020: Research design and quantitative methods – graduate
  - PSY8260: Decision making – graduate
  - PSY8000: Graduate HF/IO Seminar (Brown Bag) – graduate
  - PSY3210: Cognition and Learning – undergraduate
  - PSY4280: Psychological Game Theory – undergraduate
- Interdisciplinary Applied Science and Mathematics Ph.D. Program
- Graduate faculty and program committee member
- 2007-2008 Carnegie Mellon University, Psychology Department
- ACT-R summer school – graduate and postgraduate level
- 2002-2006 Utrecht University, Institute of Information and Computing Sciences
- Scientific Research Methods – undergraduate level
  - Usability Evaluation Methods – masters level
  - Advanced Research Methods – masters level
- 1998-2000 University of Bucharest, Psychology Department
- Psychology of Work – undergraduate level
- 1996-1998 Polytechnic University of Bucharest
- Industrial Psychology – undergraduate level

**Industry and business experience**

- 2019-present Kairos Research, Dayton, OH
- Consultant
  - Data analysis and experiment design
- 2000-2002 Atlas Consel, Bucharest
- Consultancy Manager
  - Consultancy projects in Human Resources and Management
- 1998-2000 HRD – Human Resources Development company, Bucharest
- Consultant
  - Consultancy projects in Human Resources and Management
- 1996-1998 Ministry of Interior, Research and Prognosis Unit, Bucharest
- Psychologist
  - Employee opinion surveys
- 1995-1996 Institute of Aviation Medicine, Bucharest
- Psychologist
  - Administration of psychological tests
  - Selection of Pilots and Air Traffic Controllers
- 1994-1995 Romanian Railway Authority, Human Factors Department
- Data-entry Operator and Field Research Assistant
  - Ergonomics, Job Analysis, Human Reliability

**Invited talks**

- 2018 U.S. Air Force Research Laboratory
- “Strategic thinking: theoretical, empirical, and computational explorations”
- 2016 ACT-R Postgraduate Summer School
- “Learning to trust and trusting to learn”
- 2012 Wright State University, College of Science and Mathematics, Department of Psychology
- “From cognitive strategies to strategic thinking: empirical and computational explorations”
- 2012 State University of New York – Oswego
- “Generalization of learning in games of strategic interaction”
- 2012 Penn State University, College of Information Sciences and Technologies, Applied Cognition Lab

- “Models of strategic interaction”
- 2011 Arizona State University, Department of Technology and Innovation
  - “Computational Cognitive Modeling as a Method for Theory Building and Application Design”
- 2010 Romanian Academy of Science
  - “Developing human-like virtual players for educational games using the ACT-R cognitive architecture”
- 2009 Carnegie Mellon University, Department of Social and Decision Sciences
  - “The paradoxical nature of cognitive control: Empirical and computational explorations”
- 2008 Wichita State University, Psychology Department
  - “Mechanisms of repetition suppression”
- 2007 Romanian Computer-Human Interaction (RoCHI) Conference
  - “IONS-VIP: A cognitive model for navigating the Web via screen readers” - keynote lecture
- 2006 University of Pittsburgh  
Personalized Adaptive Web Systems (PAWS) Group
  - “Model-based highlighting to support selective reading on the Web”

**Advising and mentoring**

- Postdoctoral researchers:
  - o Jeff Nador, Ph.D., Othalia Larue, Ph.D.
- Graduate students at Wright State University:
  - o Advising and co-advising:
    - Joseph Glavan, Lori Mahoney, Cara Zinn, Jarean Carson, Alexander Hough, Michael Collins, Kevin O'Neill, Peter Crowe, Gary Douglas, Mohd Saif Usmani
  - o Dissertation committee:
    - Abraham Haskins, Jasmine Duran, Clayton Rothwell, Kyle Behymer, Beth Peyton, Andrew Hampton, Elizabeth Frost, Taleri Hammack
  - o Qualifying exam committee:
    - Rashedul Islam, Cara Zinn, Lori Mahoney, Abraham Haskins, Joseph Glavan, Birken Noesen, Andrew Hampton, Jordan Haggitt, Taleri Hammack
  - o Master thesis committee:
    - Justin Morgan, Meagan Rose Newman, Truman Gore, Jennifer Baumgartner, Elisabeth Fox, Joseph Glavan, Claire Shah, August Capiola, Abraham Haskins.
- Undergraduate research internships at Wright State University:
  - o Collin Moser (honors), John Foster, Tesla Gray, Cody Otten, Michael Gordon Collins, Aneesh Chaudhry, Albert Simmons, Steven Sherer
- Miscellanea:
  - o David Cades, Andrea Heiberg, and Katja Mehlhorn:
    - supervised their modeling projects for the ACT-R summer school
  - o Arnaud Lek:
    - co-advised his Master thesis at Utrecht University
  - o Poyan Karbor, Brian Pauw, Ellert van den Broek, Vincent van der Linden, Koen Buurman, Martijn Abbing, and Richard van Yperen:
    - supervised their undergraduate research internships at Utrecht University
  - o Matias Janvin
    - Winner of the Norwegian Contest for Young Scientists 2011 with a paper on Behavioral Game Theory

**Grant support**

- 2020: Joint DoD and WSU Center of Neuroimaging and Neuro-Evaluation of Cognitive Technologies (CONNECT)
  - o Granting Agency: Air Force Office of Scientific Research (FOA-AFRL-AFOSR-2019-0001)
  - o Role: Co-PI
  - o All Co-PIs: Matthew Sherwood (Wright State University), Assaf Harel (Wright State University), Ion Juvina (Wright State University), Nicholas Reo (Wright State University)
  - o Total Cost: \$1,502,643

- 2019-present: “Forecasting Counterfactuals in Uncontrolled Settings - FOCUS”
  - o Role: consultant
  - o Funding source: IARPA
  - o PI: Alice Leung, Raytheon/BBN
  - o Effort: 32 hours / month
- 2019-2021: “Recovering the Sources of Individual Differences Unduly-named Errors - ReSIDUE”.
  - o Funding source: DARPA.
  - o Role: PI
  - o Co-PIs: Pascal Hitzler, Kansas State University, and Brandon Minnery, Kairos Research.
  - o Effort: 1 postdoc, 1 course buyout, and 4 months faculty summer salary.
  - o Funds total: \$892,328
- 2019: Cognitive Models of Social Intelligence and Teamwork
  - o Funding source: Wright State Research Institute
  - o Role: PI
  - o Effort: 1 postdoc (Othalia Larue)
  - o Funds: \$28,278.96
- 2018: Goal-driven Agile Teams and Environments (GATE)
  - o Funding source: DARPA
  - o PIs: Brandon Minnery and Michael T. Cox, WSRI
  - o Effort: 1 course buyout, 1 postdoc
  - o Funds for Ion Juvina: \$89,997
- 2017 – 2019: “Hybrid Forecasting Competition”
  - o Funding source: IARPA
  - o PI: Brandon Minnery, WSRI
  - o Co-PI: Ion Juvina
  - o Effort: 1 months summer salary, 1 part-time (6 months) postdoc
  - o Funds for Ion Juvina: \$67,379
- 2015 – 2018: “Lapses of Attention Predicted in Semi-structured Ecological Settings (LAPSES)”
  - o Funding source: Office of Naval Research
  - o Role: Co-PI
  - o Effort: 1.5 months summer salary, 1 postdoc (co-advised with Assaf Harel)
  - o Total funds: \$743,862
  - o Funds allocated to Ion Juvina: \$256,960
- 2014 – 2017: “Theory and Research Unifying Social, game-Theoretical, Ecological, Cognitive & Computational Approaches to Trust Dynamics (TRUSTE-CC)”
  - o Funding source: Air Force Office of Scientific Research
  - o Role: Principal Investigator
  - o Effort: 1 course buyout per semester, 1 postdoc, and 1 graduate student
  - o Funds: \$448,870
- Summer 2014: Repperger Internship to graduate student Gary Douglas
  - o Funding source: Air Force Research Laboratory
  - o Role: Faculty advisor

- Effort (Gary Douglas): 100% of 12 weeks
  - Total funds: \$12,000
- Summer 2014: Support for Midwest CogSci Conference
  - Funding source: Air Force Office of Scientific Research
  - Role: Co-chair
  - Total funds: \$4,000 (Shared with Joe Houpt)
- Summer 2014: Support for Midwest CogSci Conference
  - Funding source: Ball Aerospace Technologies, Corp.
  - Role: Co-chair
  - Total funds: \$1,000 (Shared with Joe Houpt)
- Summer 2013: “Neurocognitive mechanisms of learning acceleration under conditions of brain stimulation”
  - Funding source: Air Force Office of Scientific Research
  - Supervisor: Tiffany Jastrzembski
  - Role: Faculty Fellow
  - Effort: 100% of 12 weeks
  - Funds: \$15,600
- 2013 – 2015: “NEUMET-CO: A neuroimaging augmented meta-cognition model to predict the decision-making capabilities of war fighters” – Phase II
  - Funding source: Office of Naval Research
  - PI: Priya Ganapathy
  - Role: PI on subcontract to Wright State University
  - Funds: \$69,912
- Summer 2012 – Spring 2013: “Neurocognitive mechanisms of learning acceleration following brain stimulation”
  - Funding source: Air Force Research Laboratory
  - PI: Tiffany Jastrzembski
  - Role: Associate investigator
  - Effort: 25% of full time
  - Funds: \$25,000
- Spring 2012 – Summer 2012: “Modeling divers’ performance in the N-Back-M-Pitch paradigm”
  - Funding source: Naval Submarine Medical Research Laboratory
  - PI: Michael Qin
  - Role: Associate investigator
  - Effort: 16% of full time
  - Funds: \$9,471
- 2011 – 2012: “NEUMET-CO: A neuroimaging augmented meta-cognition model to predict the decision-making capabilities of war fighters” – Phase I
  - Funding source: Office of the Secretary of Defense
  - PI: Priya Ganapathy
  - Role: Academic consultant
  - Effort: 5%
- 2010 – 2012: “Understanding conflict with a socio-cognitive computational approach” (Defense Threat Reduction Agency; PIs: Cleotilde Gonzalez and Christian Lebiere)

- Role: Member of the project team
- 2008 – 2010: “Learning robustly through embedded cognition” (Air Force Office of Scientific Research grant; PI: Niels A. Taatgen)
  - Role: Co-PI
- 2007 – 2009: “Cognitive models of individual differences and variability of behavior in complex skill acquisition” (Office of Naval Research grant; PI: Niels A. Taatgen)
  - Role: Member of the project team
  - Represented the team at the ONR project review meeting 2007
- 2006 – 2007: “The Representation and Learning of Procedures” (NASA; PIs John R. Anderson and Niels A. Taatgen)
  - Role: Member of the project team

### Awards

- The James Chen Best Student Paper Award at the 10th International Conference on User Modelling, Edinburgh, Scotland, July 24-29, 2005.

### Conference organization

- Chair of
  - The International Conference on Cognitive Modeling 2018
- Chair of Awards Committee at:
  - CogSci 2017
- Member of the tutorials review committee at:
  - ICCM 2016
- Member of the program committee at:
  - SBP-BRIMS 2020
  - CogSci (The Annual Meeting of the Cognitive Science Society) 2015 – 2019.
  - ICCM (International Conference on Cognitive Modeling) 2016 – 2018
  - The International Conference on Augmented Cognition 2014 – 2018
  - ACM Hypertext (27<sup>th</sup> ACM Conference on Hypertext and Social Media) 2016
  - IndiDiff (Web Search and Individual Differences) 2016
  - BRiMS (Behavioral Representation in Modeling and Simulation) 2014
  - RoCHI (Romanian Chapter of ACM SIGCHI) 2004 - 2011
- Co-chair and member of the organizing committee at:
  - The 4<sup>th</sup> Annual Midwestern Cognitive Science Conference - 2014
- Member of the Organizing Committee at:
  - AAI symposium on Integrated Cognition – Fall 2013
- Chair of the Program Committee at:
  - RoCHI 2008, Iasi, Romania
- Member of the Organization Committee at:
  - Tamodia (Task Models and Diagrams for User Interface Design), Bucharest 2002.

### Editorial Boards & Editorial Services



- Frontiers in Psychology
  - o Member of the Editorial Board
  - o Review editor for Cognitive Science section
- Revista de Psihologie
  - o Member of the Editorial Board
  - o Member of the International Scientific Committee

**Ad-Hoc Reviewer**

- National Science Foundation – Perception, Action & Cognition
- PLOS ONE (2020)
- ACM Transactions on Intelligent Interactive Systems (2017-2018)
- Economic Theory (2017)
- Psychological Review (2012-2016)
- Memory & Cognition
- Journal of Experimental Psychology: Learning, Memory, and Cognition (2012, 2019)
- Topics In Cognitive Science
- Cognitive Science Journal (2006 - 2016)
- Behavior & Information Technology
- Journal of Cognitive Systems Research
- Journal of Artificial General Intelligence
- Journal of Computational and Mathematical Organization Theory
- Interacting with Computers
- Applied Psychology – An International Review
- European Review of Applied Psychology
- Information Design Journal
- Frontiers in Psychology section Cognitive Science (2015-2018)
- IEEE Transactions on Computational Social Systems
- Romanian Review of Human-Computer Interaction
- Midwestern Cognitive Science (MWCogSci) Conference (2014)
- Cognitive Science (CogSci) Conference (2005-2018)
- International Conference on Cognitive Modeling (2017-2018)
- Human Factors and Ergonomics Society (HFES) Conference (2009 – 2016)
- Behavior Representation in Modeling and Simulation (BRIMS) Conference
- Romanian Computer Human Interaction (RoCHI) Conference
- Human-Computer Interaction International Conference
- Augmented Cognition Conference (2014-2018)
- ACM Hypertext Conference (2016)

**Academic service**

- University-level service:
  - o Member of the Research Advisory Council for the Wright State Research Institute
- College-level service:
  - o Member of Promotion and Tenure committee (2020-present)

- Member of the Program Committee for the Interdisciplinary Applied Science and Mathematics (IASM) program
- Chair of a committee tasked with reviewing the department Chair's performance (2018)
- Member of the College of Science and Math's Scholarship committee (2013)
- Department-level service:
  - Organizer of the Department of Psychology Brown Bag seminar series (2014-present)

### Affiliations

- RoCHI – Romanian Special Interest Group in Computer-Human Interaction
  - Founding member and member of the Editorial Board
- Cognitive Science Society
- Psychonomic Society

### Skills

- Language: Romanian (native), English (fluent)
- Computer: programming (Lisp, Matlab), cognitive modeling (ACT-R)
- Data: collection (The Observer, Camtasia, E-prime) and analysis (Statistica, SPSS, R, SPM, FSL)
- Scientific editing, writing, and presentation skills
- Project management skills

### Hobbies

- Sports – Soccer and Squash

## Publications

### Papers in preparation / submitted / in press

Widmer, C., Summerville, A., Minnery, B., Ganapathy, S., & Juvina, I. (in preparation). A Human-Machine Hybrid Approach to Improving Accuracy in Geopolitical Forecasting.

Widmer, C., Summerville, A., Juvina, I., & Minnery, B. (in preparation). Effects of choice restriction on accuracy and user experience in an internet-based geopolitical forecasting task.

### Videos

Lab introduction video: <https://www.youtube.com/watch?v=Edn54dpeFWE>

Juvina, I. (2020). Modeling peer effects in interactive learning. Talk at the 27th ACT-R Workshop. <https://mathpsych.org/presentation/269>

Juvina, I., Grange, J. A., & Lebiere, C. (2011, November). From Repetition Suppression

in Stroop to Backward Inhibition in Task Switching: An Example of Model Reusability. Talk at the Annual Conference of Biologically Inspired Cognitive Architecture (BICA), Arlington, VA. <https://vimeo.com/33767077>

### Book chapters

Juvina, I., Larue, O., Widmer, C., Ganapathy, S., Nadella, S., Minnery, B., Ramshaw, L., Servan-Schreiber, E., Balick, M., & Weischedel, R. (2020). Computer-supported collaborative information search for geopolitical forecasting. In Wai Tat Fu & Herre van Oostendorp (Eds.) *Understanding and Improving Information Search – A Cognitive Approach*. Human-Computer Interaction Series, Springer Nature.

### Papers in peer reviewed journals

Hough, A., O'Neill, K., & Juvina, I. (2021). Counterfactual-based Nudging and Signaling Promote More Efficient Coordination During Group Tasks. *Comprehensive Results in Social Psychology*.

<https://www.tandfonline.com/doi/full/10.1080/23743603.2020.1860674>

Nador, J., Harel, A., Juvina, I., Minnery, B. (2020). The Case of the Cognitive (Opti)miser: Electrophysiological Correlates of Working Memory Maintenance Predict Demand Avoidance. *Journal of Cognitive Neuroscience* 32(8): 1550-1561.

Myers, C., Houpt, J., & Juvina, I. (2019). Editors' Introduction: Best Papers From the 2018 International Conference on Cognitive Modeling. In Christopher Myers, Joseph Houpt, and Ion Juvina (Topic Editors) Best Papers from the 16th International Conference on Cognitive Modeling, *Topics in Cognitive Science* 11: 220–221.

Juvina, I., Collins, M.G., Larue, O., Kennedy, W., de Visser, E., & de Melo, C. (2019). Toward a unified theory of learned trust in interpersonal and human-machine interactions. *ACM Transactions in Interactive Intelligent Systems*, 9(4), 1-33.

Larue, O., West, R., Rosenbloom, P.S., Dancy, C.L., Samsonovich, A.V., Petters, D., & Juvina, I. (2018). Emotion in the Common Model of Cognition, *Procedia Computer Science*, 145: 740-746.

Juvina, I., Larue, O., & Hough, A. (2018). Modeling valuation and core affect in a cognitive architecture: The impact of arousal and valence on memory and decision-making. *Cognitive Systems Research* 48: 4-24.

<http://dx.doi.org/10.1016/j.cogsys.2017.06.002>

Ulrich, D. L., Brewer, T. L., Steele-Johnson, D., Juvina, I., Peyton, E. J., & Hammond, C. (2017). Team-Based Learning Effects on Standardized Test Scores and Student Reactions. *Journal on Excellence in College Teaching*, 28(2), 133-165.

Larue, O. & Juvina, I. (2016). A call for unification of dual- and single-process accounts in cognitive models of intuition. *Journal of Applied Research in Memory and Cognition*. 5(3):338-340, <http://dx.doi.org/10.1016/j.jarmac.2016.06.007>

Collins, M.G., Juvina, I., & Gluck, K. (2016). Cognitive model of trust dynamics predicts outcomes within and between two games of strategic interaction. *Frontiers in Psychology, section Cognitive Science*, 7.

Juvina, I., Lebiere, C., & Gonzalez, C. (2015). Modeling trust dynamics in strategic interaction. *Journal of applied research in memory and cognition*. 4(3): 197-211. <http://dx.doi.org/10.1016/j.jarmac.2014.09.004>

Grange, J. A., & Juvina, I. (2015). The effect of practice on n–2 repetition costs in set switching. *Acta Psychologica*, 154, 14-25.

Martin, J.M., Gonzalez, C., Juvina, I., & Lebiere, C. (2014). A Description-Experience Gap in Social Interactions: Information about Interdependence and Its Effects on Cooperation. *Journal of Behavioral Decision Making*, 27: 349-362.

Martin, J.M., Juvina, I, Lebiere, C., & Gonzalez, C. (2013). The Effects of Individual and Context on Aggression in Repeated Social Interaction. *Applied Ergonomics*. 44(5): 710-718. doi:10.1016/j.apergo.2012.04.014

Juvina, I., Saleem, M., Martin, J.M., Gonzalez, C., & Lebiere, C. (2013). Reciprocal trust mediates deep transfer of learning between games of strategic interaction. *Organizational Behavior and Human Decision Processes*. 120(2): 206-215. <http://dx.doi.org/10.1016/j.obhdp.2012.09.004>

Grange, J.A., Juvina, I., & Houghton, G. (2013). On Costs and Benefits of n–2 Repetitions in Task Switching: Toward a Behavioural Marker of Cognitive Inhibition. *Psychological Research*. 77(2): 211-222.

Juvina, I. (2011). Cognitive Control: Componential and yet emergent. *Topics in Cognitive Sciences*. 3(2): 242-246.

Juvina, I., (2011). Neural substrates of inhibitory control: A review and critique. *Revista de Psihologie*. 57(2), 135-145.

Juvina, I., Lebiere, C., Martin, J., & Gonzalez, C. (2011). Intergroup Prisoner's Dilemma with Intragroup Power Dynamics. *Games*. 2(1), 21-51.

Juvina, I., & Taatgen, N. A. (2009). A repetition-suppression account of between-trial effects in a modified Stroop paradigm. *Acta Psychologica*. 131(1), 72-84.

Taatgen, N.A., Juvina, I., Schipper, M., Borst, J., & Martens, S. (2009). Too much control can hurt: A threaded cognition model of the attentional blink. *Cognitive Psychology*, 59, 1-29.

Juvina, I., & van Oostendorp, H. (2008). Modeling semantic and structural knowledge in Web navigation. *Discourse Processes*, 45(4), 346-364.

Van Oostendorp, H., & Juvina, I. (2007). Using a cognitive model to generate Web navigation support. *International Journal of Human-Computer Studies*, 65(10), 887-897.

Juvina, I., & van Oostendorp, H. (2006). Individual differences and behavioral metrics involved in modeling web navigation. *Universal Access in The Information Society*, 4, 258–269.

Juvina, I., & van Oostendorp, H. (2006). Enhancing internet experience of visually impaired persons by means of dynamic highlighting and selective reading. *Information Design Journal*, 14(1), 71-81.

Van Oostendorp, H., & Juvina, I. (2006). Introduction: Text features which enable cognitive strategies during text comprehension. *Information Design Journal*, 14(1), 4-7.

### **Ph.D. Dissertation**

Juvina, I. (2006). Development of a Cognitive Model for Navigating on the Web. <https://pdfs.semanticscholar.org/706f/8a160b16c72540c9afa99abcbb30aa0b6318.pdf>

### **Edited conference proceedings**

Juvina, I., Houpt, J. & Myers, C. (2018), *Proceedings of the 16th International Conference on Cognitive Modeling*. Madison, WI: University of Wisconsin.

### **Refereed papers published in official proceedings**

Sarker, M.K., Schwartz, J., Hitzler, P., Zhou, L., Nadella, S., Minnery, B., Juvina, I., Raymer, M.L., & Aue, W.R. (2020). *Wikipedia Knowledge Graph for Explainable AI*. In: Boris Villazon-Terrazas, Fernando Ortiz-Rodriguez, Sanju M. Tiwari, Shishir K. Shandilya (eds.) Knowledge Graph and Semantic Web. Second Iberoamerican Conference and First Indo-American Conference, KGSWC 2020, Merida, Mexico, November 26-27, Proceedings. Communications in Computer and Information Science, vol. 1232, Springer, Heidelberg, 2020, pp. 72-87.

Larue, O., Juvina, I., Cox, M., Molineaux, M., Howard, B., Nichols, E., & Minnery, B. (2020). *Coordination in homogeneous and heterogeneous teams*. Paper presented at Advances in Cognitive Systems conference.

Juvina, I., Larue, O., Widmer, C., Ganapathy, S., Nadella, S., Minnery, B., Ramshaw, L., Servan-Schreiber, E., Balick, M., & Weischedel, R. (2019). *Task-offload Tools Improve*

*Productivity and Performance in Geopolitical Forecasting*. Paper presented at AAAI Fall Symposium on Cognitive Systems for Anticipatory Thinking.

Nador, J., Harel, A., Juvina, I., & Minnery, B. (2019). EEG Correlates of Working Memory Predict Gaze Variability during a Real-World Information Foraging Task. 2nd International Neuroergonomics Conference. Human Neuroscience Archive.  
[https://www.frontiersin.org/10.3389/conf.fnhum.2018.227.00093/event\\_abstract](https://www.frontiersin.org/10.3389/conf.fnhum.2018.227.00093/event_abstract)

Juvina, I., Nador, J., Larue, O., Green, R., Harel, A., & Minnery, B. (2018). Measuring individual differences in cognitive effort avoidance. In T.T. Rogers, M. Rau, X. Zhu, & C. W. Kalish (Eds.), *Proceedings of the 40th Annual Conference of the Cognitive Science Society* (pp. 1886-1891). Austin, TX: Cognitive Science Society.

Larue, O., Hough, A., & Juvina, I. (2018). A cognitive model of switching between reflective and reactive decision making in the Wason task. *Proceedings of the International Conference on Cognitive Modeling*.

Crowe, P., Collins, M., Larue, O., Green, R., Hough, A., & Juvina, I. (2017). Examining the role of trust in peer-assisted learning. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*. Vol. 61, Issue 1, pp. 165-169.

Larue, O., Hough, A., & Juvina, I. (2017). A core affect model of decision making in simple and complex tasks. In G. Gunzelmann, A. Howes, T. Tenbrink, & E. Davelaar (Eds.), *Computational Foundations of Cognition: Proceedings of the 39<sup>th</sup> Annual Meeting of the Cognitive Science Society* (pp. 718-723). London: Cognitive Science Society (29% acceptance rate).

Juvina, I., Collins, M.G., Larue, O., & de Melo, C. (2016). Toward a unified theory of learned trust. In D. Reitter & F. E. Ritter (Eds.), *Proceedings of the 14th International Conference on Cognitive Modeling* (pp. 188-193). University Park, PA: The Pennsylvania State University.

Larue, O. & Juvina, I. (2016). Modeling cognitive parsimony with a demand selection task. In D. Reitter & F. E. Ritter (Eds.), *Proceedings of the 14th International Conference on Cognitive Modeling* (pp. 276-278). University Park, PA: The Pennsylvania State University.

Collins, M.G., Juvina, I., & Gluck, K. (2016). Game-specific and player-specific knowledge combine to drive transfer of learning between games of strategic interaction. In *Proceedings of the International Conference on Social Computing, Behavioral-Cultural Modeling & Prediction and Behavioral Representation in Modeling and Simulation* (pp. 186-195), Washington DC: Springer.

Larue, O., Juvina, I., Douglas, G., & Simmons, A. (2015). Predicting Learner Performance using a Paired Associate Task in a Team-Based Learning Environment. In D.D. Schmorrow & C. M. Fidopiastis (Eds.), *Proceedings of the 9th International*

*Conference on Augmented Cognition affiliated to Human-Computer Interaction International conference* (pp. 449-460), Los Angeles, CA: Springer.

Juvina, I., Ganapathy, P., Sherwood, M., Usmani, M.S., Kunapuli, G., Tamminedi, T., Kashou, N. (2015). Neurocognitive correlates of learning in a visual object recognition task. In D.D. Schmorow & C. M. Fidopiastis (Eds.), *Proceedings of the International Conference on Augmented Cognition affiliated to Human-Computer Interaction International conference* (pp. 256-267), Los Angeles, CA: Springer.

Ganapathy, P., Juvina, I., Tamminedi, T., Kunapuli, G., Sherwood, M., & Usmani, M.S. (2015). Development of a Smart Tutor for a Visual-Aircraft Recognition Task. In D.D. Schmorow & C. M. Fidopiastis (Eds.), *Proceedings of the International Conference on Augmented Cognition affiliated to Human-Computer Interaction International conference* (pp. 583-594), Los Angeles, CA: Springer.

Juvina, I., Jastrzembki, T. S., & McKinley, A. (2013). When to apply brain stimulation to achieve learning acceleration. In R.L. West & T.C. Stewart (Eds.), *Proceedings of the 12th International Conference on Cognitive Modeling* (pp. 358-363), Ottawa, CA: Carleton University.

Jastrzembki, T. S., Juvina, I., & McKinley, A. (2013). Neurobiological Extensions to a Mathematical Model for Performance Enhancement Observed under Conditions of Noninvasive Brain Stimulation. In R.L. West & T.C. Stewart (Eds.), *Proceedings of the 12th International Conference on Cognitive Modeling* (pp. 131-136), Ottawa, CA: Carleton University.

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### **Unpublished papers / posters / talks given at professional conferences**

Juvina, I. (2020). Modeling peer effects in interactive learning. Paper presented at the 27th ACT-R Workshop.

Juvina, I., Aue, W. R., Minnery, B., Hitzler, P., Nadella, S., & Sarker, M. K. (2020). Counterfactual reasoning over large-scale human performance optimization experiments. Virtual poster presented at the annual meeting of the Psychonomic Society.

Juvina, I. (2020). Empirical guidance for computational models of interactive learning. Talk at the 40th Soar Workshop.

Juvina, I., O'Neill, K., Hough, A., Crowe, P., Collins, M., Larue, O., & Green, R. (2019). *Overcoming cognitive effort avoidance*. Poster presented at the 18th International Conference on Social Dilemmas. Sedona, AZ.

Widmer, C., Minnery, B., Summerville, A., & Juvina, I. (2019). Hybrid Forecasting Tools: Designing a System to Improve Geopolitical Forecasting. Paper presented at the 49th Annual Meeting of the Society for Computers in Psychology.

Hough, A., Collins, M., O'Neill, K., Green, R., Larue, O., & Juvina, I. (2019). *Measuring and Overcoming Cognitive Effort Avoidance*. Poster presented at the International Symposium for Aviation Psychology, Dayton, OH.

Nador, J., Harel, A., Juvina, I., & Minnery, B. (2018). Neural Markers of Switch-Cost Predict Cognitive Demand Avoidance. *Vision Science Society, Annual Meeting*.

Nador, J., Minnery, B., Juvina, I., & Harel, A. (2018). Neural Markers of Switch-Cost Predict Cognitive Demand Avoidance. *Seventh Annual Midwest Cognitive Science Conference*.

O'Neill, K., Green, R., & Juvina, I. (2018, May). *Inducing and transferring the state of flow to arbitrary attentional control tasks*. Poster presented at the Midwest CogSci Conference, Bloomington, IN.

Hough, A., O'Neill, K., Collins, M., & Juvina, I. (2018, May). *Cognitive effort in individual and group tasks*. Poster presented at the Midwest CogSci Conference, Bloomington, IN.

Juvina, I., Nador, J., Larue, O., Green, R., Minnery, B., & Harel, A. (2017, July). *Measuring Demand Avoidance with the Demand Selection Task: Challenges and Opportunities*. Presented at the CogSci Conference, London, UK.

Juvina, I. & Larue, O. (2017, March). *Modeling costs and benefits of negative affect*. Presented at the 59<sup>th</sup> Conference of Experimental Psychologists (TeaP 2017), Dresden, Germany.

Nador, J., Minnery, B., Sherwood, M., Harel, A. & Juvina, I. (2017). Working Memory Capacity and Cognitive Filtering Predict Demand Avoidance. *Vision Science Society, Annual Meeting*.

Nador, J., Minnery, B., Sherwood, M., Green, R., Harel, A. & Juvina. (2016) Working Memory Capacity and Cognitive Filtering Predict Demand Avoidance. *Object Perception Attention and Memory*.

Usmani, M.S., Juvina, I., Sherwood, M., Ganapathy, P., Kunapuli, G., Tamminedi, T., & Kashou, N.H. (2016, June). *Visual Task Learning of Familiar vs Non-Familiar Objects: An fMRI Study*. Presented at the 22nd Annual Meeting of the Organization for Human Brain Mapping, Geneva, Switzerland.

Juvina, I., Larue, O., Collins, M.G., & Crowe, P. (2016, August). *Learning to trust and trusting to learn*. Presented at ACT-R Postgraduate Summer School, Lancaster, PA.

Larue, O. & Juvina, I. (2016, August). *From implicit affect to explicit emotion*. Presented at ACT-R Postgraduate Summer School, Lancaster, PA.

Juvina, I. & Larue, O. (2015, July). *The effect of interaction in a team-based learning environment*. Presented at ACT-R Workshop, Pittsburgh, PA.

Collins, M.G., Juvina, I., & Gluck, K. (2015, July). *Comparing Predicted and Observed Trust Dynamics Within and Between Games of Strategic Interaction*. Presented at ACT-R Workshop, Pittsburgh, PA.

Simmons, A., Juvina, I., Larue, O., & Douglas, G. (2015, April). *Comparing passive and active learning conditions via cognitive modeling*. Presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL.

Collins, M., Juvina, I., Douglas, G., & Gluck, K. (2015, March). *Predicting Trust Dynamics and Transfer of Learning in Games of Strategic Interaction as a Function of a Player's Strategy and Level of Trustworthiness*. Presented at BRIMS2015 Conference, Washington, DC.

Collins, M., Juvina, I., Douglas, G., Gluck, K. (2014, May). *Modeling trust dynamics in games of strategic interaction*. Presented at The Fourth Annual Midwest Cognitive Science Conference, Dayton, OH.

Douglas, G., Juvina, I. (2014, May). *Trust mitigates uncertainty in team-based learning*. Presented at The fourth annual Midwest Cognitive Science Conference, Dayton, OH.

Peyton, E. J., Steele-Johnson, D., Brewer, T., Ulrich, D., Parmelee, D., & Juvina, I. (2014, March). *Examining Shared Leadership and Decision Making as Processes that Underpin TBL's Relationship with Academic Performance*. Presented at the Team Based Learning Cooperative Conference, Ft. Worth, TX.

Ulrich, D. L., Brewer, T. L., Steele-Johnson, D., Juvina, I., & Peyton, E. J. (2013, November). *How to surpass national averages: Team-based learning boosts standardized test scores in nursing*. Presented at the 33<sup>rd</sup> Annual Lilly International Conference on College Teaching, Miami, OH.

Juvina, I., Oltramari, A., & Lebiere, C. (2011, July). Theoretical and empirical guidance for a chunk valuation mechanism in ACT-R. Presented at The ACT-R Post Graduate Summer School, North Conway, NH.

Grange, J. A., & Juvina, I., (2011, September). Inhibition & facilitation in task switching: A computational model. Presented at the Annual Conference of the British Psychological Society, Cognitive Psychology Section, Keele, U.K.

Juvina, I., Grange, J. A., & Lebiere, C. (2011, November). From Repetition Suppression in Stroop to Backward Inhibition in Task Switching: An Example of Model Reusability. Presented at the Annual Conference of Biologically Inspired Cognitive Architecture (BICA), Arlington, VA.

Martin, J.M., Juvina, I., Lebiere, C., & Gonzalez, C. (2011, July). *The Effects of Individual and Context on Aggression in Repeated Social Interaction*. Presented at Human Computer Interaction International Conference. Thematic area: Engineering Psychology and Cognitive Ergonomics.

Juvina, I. (2011, March). *Intergroup Prisoner's Dilemma with Intragroup Power Dynamics*. Presented at Behavior Representation in Modeling and Simulation (BRIMS) Conference.

Juvina, I., Lebiere, C., Martin, J., & Gonzalez, C. (2011, February). *Understanding and Modeling Power Dynamics in IPD<sup>2</sup>*. Presented at Human Social Culture Behavior Modeling (HSCB2011) Conference, Chantilly, VA.

Juvina, I., Lebiere, C., Martin, J., & Gonzalez, C. (2010, August). *IPD2: A game paradigm for studying intragroup power dynamics*. Presented at The Annual Conference of the Cognitive Science Society, Workshop on Cognitive Social Sciences, Portland, OR.

Lebiere, C., Stocco, A., Reitter, D., & Juvina, I. (2010). *Scaling up high-fidelity cognitive modeling to real-world applications*. In Proceedings of NATO Workshop on Human Modeling for Military Application. Amsterdam, NL, October 18-20.

Juvina, I., & Taatgen, N.A. (2009, November). *Disruption of task-specific strategies promotes strategic thinking*. Presented at the 4th Computational Cognitive Neuroscience Conference, Boston, MA.

Juvina, I., & Taatgen, N.A. (2008, July). *How do we ignore irrelevant information presented on displays?* Presented at the Fifteenth Annual ACT-R Workshop, Pittsburgh, PA.

Juvina, I. (2007, September). *IONS-VIP: a cognitive model for navigating the web via screen readers*. Presented at the Fourth Annual Conference of RoCHI, Constanta, Romania.

Juvina, I., & Oostendorp, H. van (2005, July). *Bringing cognitive models in the domain of Web accessibility*. Presented at the HCI International conference, Las Vegas.