IRINA RABKINA

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EDUCATION

Northwestern University, Evanston, IL

Ph.D. in Computer Science, Certificate in Cognitive Science   2020 (Expected)
  Thesis: *Analogical Theory of Mind: Computational Model and Applications*
  Committee: Kenneth D. Forbus (chair), Dedre Gentner, Laura M. Hiatt, Ian Horswill

Loyola University Chicago, Chicago, IL

M.S. in Computer Science   2015
  Coursework only

Scripps College, Claremont, CA

B.A. Honors in Neuroscience   2014

Minor: Computer Science
  Thesis: *Examining the Cognitive Advantages and Disadvantages of the Bilingual Brain*
  Advisors: Michael Spezio and Timothy Justus

PUBLICATIONS

JOURNAL ARTICLES

Rabkina, I. and Forbus, K. D. An Analogical Model of Pretense. Under review.

Forbus, K. D., Liang, C., & **Rabkina, I.** (2017). Representation and Computation in Cognitive Models. *Topics in Cognitive Science*, 9(3), 694-718.

CONFERENCE PROCEEDINGS

Rabkina, I., Nakos, C., & Forbus, K. D. (2019) Children's Sentential Complement Use Leads the Theory of Mind Development Period: Evidence from the CHILDES Corpus. *Proceedings of the 41st Meeting of the Cognitive Science Society*, Montreal, Canada.

Chen, K., **Rabkina, I.**, McLure M. D., & Forbus, K. D. (2019) Human-like Sketch Object Recognition via Analogical Learning. *Proceedings AAAI 2019*, Honolulu, HI.

Rabkina, I., McFate, C., & Forbus, K. D. (2018) Bootstrapping from Language in the Analogical Theory of Mind Model. *Proceedings of the 40th Annual Meeting of the Cognitive Science Society*, Madison, WI.

Forbus, K. D., Hinrichs, T., **& Rabkina, I.** (2018). Building Analogy Systems: Some Lessons Learned.

Rabkina, I., McFate, C., Forbus, K. D., & Hoyos, C. (2017) Towards a Computational Analogical Theory of Mind. *Proceedings of the 39th Annual Meeting of the Cognitive Science Society*, London, England.

WORKSHOPS AND OTHER PRESENTATIONS

Blass, J., **Rabkina, I.**, and Forbus, K. D. (2017) Towards a Domain-independent Method for Evaluating and Scoring Analogical Inferences. *Computational Analogy Workshop, International Conference on Case Based Reasoning.* Trondheim, Norway.

Rabkina, I. and Forbus, K.D. (2016) An Analogical Model of Pretense. *38th Annual Meeting of the Cognitive Science Society*. Philadelphia, PA.

Rabkina, I. and Justus, T. (2016) Bilingual English-Spanish Speakers Demonstrate Language-switching Costs, but no Bilingual Advantage, in a Modified Stroop Task. *Association for Psychological Science*. Chicago, IL.

Rabkina, I., Lima Nogueira, L, and Albert, M. V. (2015) Real-time Activity Recognition Using Mobile Sensors: An Online Graphical Front-end. *45th Annual Meeting of the Society for Neuroscience*. Chicago, IL.

Rabkina, I. The Intersection of the Bilingual Advantage and Disadvantage. (2014) *Scripps College Capstone Presentations.* Claremont, CA.

Rabkina, I. Computational Modeling of Bilingual Language Acquisition and Interference in Bilingual Choice. (2013) *Fall Neuroscience Thesis Symposium of the W.M. Keck Science Department*. Claremont, CA.

Rabkina, I. and Barazza, J. The Role of Sensitivity to Positive/Negative Valence in Polyvagal Theory. (2013) *The Faculty for Undergraduate Neuroscience Poster Session*. San Diego, CA.

Rabkina, I. Narrative Values and Moral Action: Investigating Links by Combining Quantitative Semantic Analysis and Behavioral Economics. (2013) *Mellon Fellowship Undergraduate Research Presentations.* Claremont, CA.

AWARDS

Summer Research (NREIP) Fellowship, Naval Research Laboratory	2018
Glushko Travel Award, Cognitive Science Society	2018
Graduate Cohort for Women Participant, Computing Research Association	2018
Cabell Fellowship, Northwestern University	2015
Merit-based Teaching Assistantship, Loyola University Chicago (did not accept)	2014
Claremont Neuroscience Research Fellowship, Scripps College	2013
Mellon Research Fellowship, Scripps College	2013
James E. Scripps Scholarship, Scripps College	2010

TEACHING EXPERIENCE

NORTHWESTERN UNIVERSITY

Course Consultant: Conversational Interfaces	Spring 2019
Co-Instructor: Knowledge Representation & Reasoning	Winter 2019
Workshop Instructor: Computing Everywhere	2018, 2019
Teaching Assistant: Introduction to Cognitive Modeling	Fall 2016, 2017

POMONA COLLEGE
  Peer Mentor: Computation & Cognition   Spring 2014
  Peer Mentor: Foundations of Computer Science   Fall 2013

RESEARCH EXPERIENCE

NORTHWESTERN UNIVERSITY
  Research Assistant**,** Qualitative Reasoning Group   2015—present
  My work focuses on the social reasoning capabilities of the Companion
  Cognitive Architecture. Specifically, I have developed a cognitive model of
  theory of mind reasoning via analogy and am applying it to improve virtual
  agents' interaction and collaboration in multi-agent (virtual and human-
  virtual mixed) environments.

NAVAL RESEARCH LABORATORY
  NREIP Intern, Navy Center for Applied Research in Artificial Intelligence   2018
  Collaborated with NRL researchers and interns to build an experimental
  middleware to connect the Microsoft Malmo Minecraft environment with
  a variety of planning and reasoning systems.

LOYOLA UNIVERSITY OF CHICAGO
  Research Assistant, Pervasive and Ambient Computing Lab   2014 – 2015

PITZER COLLEGE
  Senior Thesis Student, Music and Language Cognition Lab   2013 – 2014

STANFORD UNIVERSITY
  Summer Research Assistant, Cognitive and Systems Neuroscience Laboratory   2013

CLAREMONT GRADUATE UNIVERSITY
  Undergraduate Research Assistant, Center for Neuroeconomics Studies   2012 – 2014

SCRIPPS COLLEGE
  Research Assistant, Spezio Lab   2011 – 2013

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO
  Summer Student, Swanson Lab   2009, 2011

SERVICE TO PROFESSION

REVIEWING
  Cognitive Science Society, International Conference on Case Based Reasoning (ICCBR)

ORGANIZING
Special Track on Computational Analogy, ICCBR   2018

SERVICE TO DEPARTMENT

COMPUTER SCIENCE DEPARTMENT, NORTHWESTERN UNIVERSITY
Graduate Women in Computing (GWiC), Founder & Co-President   2019 – present
Artificial Intelligence Journal Club (AIJC), Leadership Board Member   2017 – present
Computer Science PhD Advisory Council (CSPAC), Founding Member   2017 – 2018

KECK SCIENCE DEPARTMENT, CLAREMONT, CA
Socializing with Scientists, Leadership Board Member   2013 – 2014

PROFESSIONAL EXPERIENCE

HERE Maps, Chicago, IL
Software Engineer   2014 – 2015
Built and maintained front-end interface to large-scale noSQL
database. Trained and supported non-technical internal
customers on interface and database use.

COMMUNITY INVOLVEMENT

She Is Code, Evanston, IL
Advisory Board Member   2016 – present
Curriculum and Instruction Volunteer   2015 – present