JULIA MICHELLE TAYLOR

Computer & Information Technology
243 Knoy Hall
Purdue University
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EDUCATION:

Ph.D. Computer Science and Engineering, University of Cincinnati, 2008
   Dissertation: *Towards Informal Computer Human Communication: Detecting Humor in Restricted Domain*
   Supervisor: Dr. Lawrence J. Mazlack
   Committee members: Drs. Peter Chiu, Carla Purdy, John Schlipf, Michèle Vialet

M.S. Computer Science, University of Cincinnati, 2004
   Master's Thesis: *Computational Recognition of Humor In A Focused Domain*
   Supervisor: Dr. Lawrence J. Mazlack
   Committee members: Drs. Carla Purdy, John Schlipf, Michèle Vialet

B.A. Mathematics, University of Cincinnati, 1999

B.S. Computer Science, University of Cincinnati, 1999

PROFESSIONAL EXPERIENCE:

7/2011 – present, Purdue University, West Lafayette, Indiana
   8/2016 Associate Professor (with tenure), Computer and Information Technology
   1/2012 – 5/2016, Assistant Professor, Computer and Information Technology
   8/2011 – 12/2011, Research Assistant Professor, Center for Education and Research in Information Assurance and Security (CERIAS)
   7/2011 – 8/2011, Visiting Assistant Professor, CERIAS
11/2008 – 6/2011, RiverGlass, Inc, Champaign, Illinois
   Senior Research Engineer, Ontological Semantics
06/2008 – 11/2008, Cincinnati Children's Hospital and Medical Center, Cincinnati, Ohio
   Research Fellow, Biomedical Informatics
07/2007 – 11/2008, hakia, Inc, New York, New York
   Senior Consultant, Ontological Semantics
09/2004 – 06/2008, University of Cincinnati, Cincinnati, Ohio
   7/2007 – 6/2008, Research Assistant, Electrical and Computer Engineering Department
   9/2004 – 6/2007, Research/Teaching Assistant, Electrical and Computer Engineering and Computer Science Department
06/1999 – 09/2004, Computer Associates Int**.**, Mason, Ohio
   Software Engineer, Research and Development
03/1998 –05/1999, Structural Dynamics Research Corporation, Milford, Ohio
   09/1998 –05/1999, Part-time position, Quality Assurance group, IDEAS
   03/1998 – 09/1998, Co-op, Quality Assurance group, IDEAS
03/1997 – 09/1997, Millennium Petrochemicals, Cincinnati, Ohio
   Co-op, IS Computer Support

PUBLICATIONS:
Book:

Julia M. Taylor (in preparation) *Computing Humor, Language, and Fuzziness: A Funny Kind of AI*, solicited by the Humor Research Series, Berlin: Mouton de Gruyter, 2016

Book Chapter and Journal Publications:

Julia M. Taylor (in press) Computational treatments of humor. In S. Attardo (Eds) *Routledge Handbook of Language and Humor*, 2016

Julia M. Taylor (in press) Ontological Semantic Theory of Humor in a context of humorous discourse, In W. Chlopicki & D. Brzozowska, (Eds.), *Humorous Discourse*, Cambridge, UK: Cambridge Scholarly Publishers.

Julia M. Taylor (2015) Different knowledge, same joke: Response-based computational detection of humor. In N. Streitz & P. Markopoulos (Eds.), *Distributed, Ambient, and Pervasive Interactions*. Springer

Ji Hyeon Hong, Eric T. Matson, & Julia M. Taylor (2014). Design of Knowledge-based Communication between Human and Robot Using Ontological Semantic Technology in Firefighting Domain. In Kim, J.-H., Matson, E.T., Myung, H., Xu, P., & Karray, F. (Eds.), *Robot Intelligence Technology and Application*, Advances in Intelligent System and Computing, 274

J. M. Taylor & V. Raskin (2013) Towards the Cognitive Informatics of Natural Language: The Case of Computational Humor, *International Journal of Cognitive Informatics and Natural Intelligence*, 7:3

J. M. Taylor (2013). The Importance of Grain Size in Communication Within Cyber-Physical Systems. In Suh, S., C., Tanik, U.J., Carbone, J.N., & Eroglu, A. (Eds.), *Applied Cyber-Physical Systems,* Springer

Taylor, J. M. (2013). Understanding and Processing Information of Various Grain Sizes. In Kim, J.-H., Matson, E.T., Myung, H., & Xu, P. (Eds.) *Robot Intelligence Technology and Applications 2012: Advances in Intelligent Systems and Computing* (vol. 208, pp. 901-910). Springer

V. Raskin & J. M. Taylor (2013) A Fresh Look at Semantic Natural Language Information Assurance and Security: NL-IAS From Watermarking and Downgrading to Discovering Unintended Inferences and on to Situational Conceptual Defaults, In B. Akhgar and H. R. Arabnia, Eds. *Emerging Trends in Information and Communication Technologies Security*, Amsterdam: Elsevier (Morgan Kaufmann)

Victor Raskin, Julia M. Taylor, & Christian F. Hempelmann (2013) Meaning- and Ontology-Based Technologies for High-Precision Language- and Information-Processing Computational Systems, *Advanced Engineering Informatics*, 27, 4-12.

Rezarta Islamaj Dogan, Yolanda Gil, Haym Hirsh, Narayanan C Krishnan, Michael Lewis, Cetin Mericli, Parisa Rashidi, Victor Raskin, Samarth Swarup, Wei Sun, Julia M Taylor, Lana Yeganova (2013) "Reports on the 2012 AAAI Fall Symposium Series", AI Magazine, 34:1, 2013

Julia M. Taylor & Victor Raskin (2012) On the Transdisciplinary Field of Humor Research. *Journal of Integrated Design and Process Science*, 16(3), 133-148.

Julia M. Taylor (2010) "Ontology-Based View of Natural Language Meaning: The Case of Humor Detection," *Journal of Ambient Intelligence and Humanized Computing*, 1:3, pp. 221-234, 2010

Julia M. Taylor, Lawrence J. Mazlack (2010) "On Computational Humor," *IEEE Potentials Magazine, 29:6, pp. 9-12, 2010*

Victor Raskin, Christian F. Hempelmann, and Julia M. Taylor (2009) "How to Understand and Assess a Theory: The Evolution of the SSTH into the GTVH and Now into the OSTH," *Journal of Literary Theory*, 3:2, pp. 285-312, 2009

René T. Proyer, Willibald Ruch, Julia Taylor (and 92 others) (2009) "Breaking ground in cross-cultural research on the fear of being laughed at (gelotophobia): A multi-national study involving 73 countries," *HUMOR: International Journal of Humor Research*, 22:1-2, pp. 253-279, 2009

Pavel Klinov, Julia M. Taylor, Lawrence J. Mazlack (2008) "Interval Rough Mereology and Description Logic: An Approach to Formal Treatment of Imprecision in the Semantic Web Ontologies," *Web Intelligence and Agent Systems: An international journal,* 6:2, pp. 157-174, 2008

Julia M. Taylor, Pavel Klinov, Lawrence J. Mazlack (2007) "A Description Logic Based Approach to Computational Humor," in Salvatore Attardo, Diana Popa (eds), *New Approaches to the Linguistics of Humor,* Academic Printing House of Our Dunarea de Jos, Romania, 2007

Encyclopedia Entries:

J. M. Taylor (2014) "Humor, Forms Of," *Encyclopedia of Humor Studies*, SAGE: Thousand Oaks, CA

J. M. Taylor (2014) "Punch Line," *Encyclopedia of Humor Studies*, SAGE: Thousand Oaks, CA

J. M. Taylor (2014) "Linguistic Theories of Humor, SSTH/GTVH/OSTH," *Encyclopedia of Humor Studies*, SAGE: Thousand Oaks, CA

J. M. Taylor (2014) "Humor Detection," *Encyclopedia of Humor Studies*, SAGE: Thousand Oaks, CA

J. M. Taylor (2014) "Computational Humor," *Encyclopedia of Humor Studies*, SAGE: Thousand Oaks, CA

Refereed Conference and Workshop Proceedings:

Victor Raskin & Julia Taylor Rayz (2016) "Logic of Natural Language: Through the Eys of Ontological Semantics" *Proceedings of IEEE ICCI*CC 2016* (accepted)

Julia Taylor & Vitaliy Rayz (2016) "Towards simulation of semantic generation and detection of humorous response" *Proceedings of HCII 2016* (accepted)

Louis Hickman, Julia Taylor & Victor Raskin (2016) "Direct Object Omission as a Sign of Conceptual Defaultness" In Proceedings of *FLAIRS 2016*, Key Largo, USA (best

student paper nominee)

Julia M. Taylor (2015) "Mapping Human Understanding to Robotic Perception." In Proceedings of *2015 International Workshop on Communication for Humans, Agents, Robots, Machines and Sensors,* Belfort, France

Tatiana R. Ringenberg, Lauren M. Stuart, Julia M. Taylor & V. Raskin (2015) "Towards Computer Understanding of Direct Object Defaults." *IEEE-SMC Conference 2015*, Hong Kong, China

Gilchan Park & Julia M. Taylor (2015) "Using Syntactic Features for Phishing Detection." *International Conference on Cyber Security 2015*

Louis Hickman, Julia M. Taylor & Victor Raskin (2015) "Fuzzy Lexical Acquisition of Adjectives." *Annual Conference of North American Fuzzy Information Processing Society*, Redmont, WA

Tatiana R. Ringenberg, Julia M. Taylor, John A. Springer & Victor Raskin (2015) "Towards Identifying Ontological Semantic Defaults with Big Data: Preliminary Results." *The Seventh International Conference on Advanced Cognitive Technologies and Applications,* Nice, France

Julia M. Taylor & Victor Raskin (2015) "Comparing Apples and Orange Cottages: Classifications and Properties." *The Seventh International Conference on Advanced Cognitive Technologies and Applications,* Nice, France

Julia M. Taylor (2015) "Different knowledge, same joke: Response-based computational detection of humor." *17th International Conference on Human–Computer Interaction*, Los Angeles, CA

Victor Raskin, & Julia M. Taylor (2015) "Comprehensive Semantics in Robotic Intelligence and Communication: Necessity and Feasibility." *ICARA 2015*.

Tatiana Ringenberg & Julia M. Taylor (2014) "Semantic Anonymization of Medical Records," *Proceedings of IEEE-SMC Conference 2014*

Gilchan Park, Lauren M. Stuart, Julia M. Taylor & Victor Raskin (2014) "Comparing Machine and Human Ability to Detect Phishing Emails." *Proceedings of IEEE-SMC Conference 2014.*

Julia M. Taylor & Victor Raskin (2014) "On the nature of composable properties." *Proceedings of AAAI'14 Workshop on Cognitive Computing for Augmented Human Intelligence 2014.*

Lauren M. Stuart, Gilchan Park, Julia M. Taylor & Victor Raskin (2014) "On Identifying Phishing Emails: Uncertainty in Machine and Human Judgment." *Proceedings of NAFIPS 2014*

Victor Raskin & Julia M. Taylor (2014) "Fuzziness, Vagueness, Uncertainty, and Probability in Natural Language." *Proceedings of NAFIPS 2014*

Julia M. Taylor & Victor Raskin (2014) "Towards a Formal Theory of Social Roles in Cognitive Computing and Cognitive Informatics." *Proceedings of IEEE ICCI*CC 2014*

Ji Hyeon Hong, Julia M. Taylor & Eric T. Matson (2014) "Natural Multi-language

Interaction between Firefighters and Fire Fighting Robots." Proceedings of 2014 IEEE/WIC/ACM International Joint Conferences on Web *Intelligence (WI) and Intelligent Agent Technologies (IAT)*.

Ji Hyeon Hong, Eric T. Matson, & Julia M. Taylor (2013) "Design of Knowledge-based Communication between Human and Robot Using Ontological Semantic Technology in Firefighting Domain," Proceedings of RiTA 2013

A. Graci, L. Stuart, J. Taylor, & V. Raskin (2013) "Towards novelty detection with Ontological Semantic Technology," Proceedings of SDPS conference, Sao Paolo, Brazil, 2013

G. Park & J. Taylor (2013) "Towards text-based phishing detection," Proceedings of SDPS conference, Sao Paolo, Brazil, 2013

L. Stuart, J. Taylor & V. Raskin (2013) "Complexity evaluation of noun-driven syntax representation," Proceedings of SDPS conference, Sao Paolo, Brazil, 2013

L. M. Stuart, S. Tazhibayeva, A. R. Wagoner, & J. M. Taylor (2013) "On Identifying Authors with Style," IEEE-SMC Conference, Manchester, UK, 2013

L. M. Stuart, S. Tazhibayeva, A. R. Wagoner, & J. M. Taylor (2013) "Style Features for Authors in Two Languages," Web Intelligence Conference, Atlanta, USA, 2013

L. M. Stuart, J. M. Taylor, V. Raskin (2013) "On a Noun-Driven Syntactic Paradigm," *Twenty-Seventh AAAI Conference on Artificial Intelligence*, Bellevue, Washington, 2013

J. M. Taylor, & V. Raskin (2013) "Natural Language Cognition of Humor by Humans and Computers: A Computational Semantic Approach," *IEEE International Conference on Cognitive Informatics & Cognitive Computing*, Fordham University, New York, NY, July 2013

L. M. Stuart, J. M, Taylor, & V. Raskin (2013) "Computing with Prepositions: Syntax." *North American Fuzzy Information Processing Society (NAFIPS '13)*, Edmonton, Alberta, Canada

J. M. Taylor, V. Raskin, & L. M. Stuart (2013) "Computing with Prepositions: Semantics" *North American Fuzzy Information Processing Society Conference (NAFIPS '13)*, Edmonton, Alberta, Canada

L. M. Stuart, J. M, Taylor, & V. Raskin (2013) "The Importance of Nouns in Text Processing," *Cognitive Science Society (CogSci '13)*, Berlin, Germany, August 2013

V. Raskin, L. M. Stuart, & J. M. Taylor (2013) "Is Natural Language Ever Really Vague? A Computational Semantic View." *IEEE International Conference on Cybernetics,* Lausanne, Switzerland, June 2013

J. M. Taylor (2012) "Understanding and Processing Information of Various Grain Sizes," *International Conference on Robot Intelligent Technology and Applications (RITA)*, Gwangju, South Korea, December 2012

J. M. Taylor (2012) "Do Jokes Have to Be Funny: Analysis of 50 'Theoretically Jokes',". *AAAI Artificial Intelligence of Humor Symposium*, Arlington, VA, November 2012

Ji Hyeon Hong, Byung-Cheol Min, Julia M. Taylor, Victor Raskin, & Eric T. Matson (2012) "NL-Based Communication With Firefighting Robots," IEEE-SMC Conference, Seoul, South Korea, October 2012

Lauren M. Stuart, Julia M. Taylor, & Victor Raskin (2012) "Towards Noun-Driven Parsing," IEEE-SMC Conference, Seoul, South Korea, October 2012

Julia M. Taylor, Victor Raskin, & Lauren M. Stuart (2012) "Machine Human Understanding: Syntax and Semantics Revisited," IEEE-SMC Conference, Seoul, South Korea, October 2012

Julia M. Taylor and Victor Raskin (2012) "Understanding and Structuring NL Descriptions: The Case of 101 Animals," IEEE-SMC Conference, Seoul, South Korea, October 2012

Julia M. Taylor, Victor Raskin (2012) "Structuring Information from Natural Language Descriptions: Accounting for Uncertainty," *International Conference of the North American Fuzzy Information Processing Society*, Berkeley, CA, August 2012

Julia M. Taylor, Victor Raskin, Christian F. Hempelmann "Ontological Properties of Animals in a Children's Dictionary With and Without Common-Sense Knowledge," *Cognitive Science Conference*, Japan, August 2012

Christian F. Hempelmann, Julia M. Taylor, Victor Raskin (2012) "Tightening Up Joke Structure: Not by Length Alone", *Cognitive Science Conference*, Japan, August 2012

James A. Crowder, Julia M. Taylor, Victor Raskin (2012) "Autonomous Creation and Detection of Procedural Memory Scripts," *International Conference on Artificial Intelligence*, Las Vegas, NE, July 2012

Lauren M. Stuart, Julia Taylor, Victor Raskin (2012) "Noun-Driven Syntactic Parsing for Natural Language Interfaces to Object-Centered Information Stores," *Society for Design and Process Science Conference*, Berlin, Germany, June 2012

Mindaugas Indriūnas, Julia Taylor, Victor Raskin (2012) "Mereological Considerations for Improving Semantic Ontology," *Society for Design and Process Science Conference*, Berlin, Germany, June 2012

Victor Raskin, Julia M. Taylor, Eric T. Matson (2012) "Towards an Ontological Modeling of Something Very Much Like Consciousness: The Harms Way," *Society for Design and Process Science Conference*, Berlin, Germany, June 2012

Victor Raskin, Julia M. Taylor (2012) "Computing with Nouns and Verbs", *FUZZ-IEEE Conference*, Australia, June 2012

Eric Matson, Julia Taylor, Victor Raskin, Byung-Cheol Min, Eunsun Wilson (2011) "A Natural Language Model for Enabling Human, Agent, Robot and Machine Interaction," *The 5th IEEE International Conference on Automation, Robotics and Applications*, Wellington, New Zealand, December 2011

Julia M. Taylor, Victor Raskin, Christian F. Hempelmann (2011) "From Disambiguation Failures to Common-Sense Knowledge Acquisition: A Day in the Life of an Ontological Semantic System," *Web Iintelligence Conference*, Lyon, France, August 2011

Julia M. Taylor, Christian F. Hempelmann, Victor Raskin (2011) "Post-Logical Verification of Ontology and Lexicons:The Ontological Semantic Technology Approach," *International Conference on Artificial Intelligence*, Las Vegas, NE, July 2011

Julia M. Taylor, Victor Raskin (2011) "Graph Decomposition and Its Use for Ontology Verification and Semantic Representation," Intelligent Linguistic Technologies Workshop, *International Conference on Artificial Intelligence*, Las Vegas, NE, July 2011

Julia M. Taylor, Victor Raskin, Christian F. Hempelmann (2011) "Towards Computational Guessing of Unknown Word Meanings: The Ontological Semantic Approach," *Cognitive Science Conference*, Boston, MA, July 2011

Julia M. Taylor, Victor Raskin (2011) "Understanding the Unknown: Unattested Input Processing in Natural Language," *FUZZ-IEEE Conference*, Taipei, Taiwan, June 2011

Julia M. Taylor, Victor Raskin (2011) "Human and Computer Humor Collaboration: What Can Computational Analysis of Humor Reveal" *SDPS Conference*, Jeju Island, South Korea, June 2011

Julia M. Taylor, Victor Raskin, Maxim S. Petrenko, Christian F. Hempelmann (2010) "Multiple Noun Expression Analysis: An Implementation of Ontological Semantic Technology," *Computational Linguistics – Applications Workshop*, 8pp. Wisla, Poland, October 2010

Julia M. Taylor, Victor Raskin, Christian F. Hempelmann, Salvatore Attardo (2010) "An Unintentional Inference and Ontological Property Defaults," *International Conference on Systems, Man and Cybernetics,* Istanbul, Turkey, October 2010

Victor Raskin, Julia M. Taylor, Christian F. Hempelmann (2010) "Ontological Semantic Technology for Detecting Insider Threat and Social Engineering," *New Security Paradigms Workshop*, pp. 115-128, Concord, MA, September 2010

Julia M. Taylor (2010) "Computational Semantic Detection of Information Overlap in Text," *Cognitive Science Conference,* pp. 2170-2175, Portland, OR, August 2010

Julia M. Taylor, Victor Raskin (2010) "Fuzzy Ontology for Natural Language," 29th *International Conference of the North American Fuzzy Information Processing Society,* 6 pp, Toronto, Canada, July 2010

Julia M. Taylor, Victor Raskin, Christian F. Hempelmann, Whitney R. Vandiver (2010) "Computing the Meaning of Number Expressions in English: The Common Case," Intelligent Linguistic Technologies Workshop, *International Conference on Artificial Intelligence,* pp. 914-920, Las Vegas, NE, July 2010

Julia M. Taylor, Christian F. Hempelmann, Victor Raskin (2010) "On an Automatic Acquisition Toolbox for Ontologies and Lexicons in Ontological Semantics," *International Conference on Artificial Intelligence,* pp. 863-869, Las Vegas, NE, July 2010

Christian F. Hempelmann, Julia M. Taylor, Victor Raskin (2010) "Application-guided Ontological Engineering," *International Conference on Artificial Intelligence,* pp. 843-849, Las Vegas, NE, July 2010

Victor Raskin, Christian F. Hempelmann, Julia M. Taylor "Guessing vs. Knowing: The Two Approaches to Semantics in Natural Language Processing," *Annual International Conference Dialogue 2010*, pp. 642-650, Moscow, Russia, May 2010 (refereed plenary paper)

Julia M Taylor (2009) "Computational Detection of Humor: A Dream or A Nightmare. The Ontological Semantics Approach," Computational Intelligence Approaches for Ontology-based Knowledge Discovery Workshop, *Web Intelligence Conference*, pp. 429-432, Milan, Italy, September 2009

Victor Raskin, Julia M. Taylor (2009) "The (Not So) Unbearable Fuzziness of Natural Language: The Ontological Semantic Way of Computing With Words," 6pp, *28th International Conference of the North American Fuzzy Information Processing Society*, Cincinnati, OH, June 2009

Julia M. Taylor, Lawrence J. Mazlack (2008) "On Perception of Size: Comparing Gigantic Mice and Tiny Elephants," 6pp, *27th International Conference of the North American Fuzzy Information Processing Society*, 6 pp., New York City, NY, May 2008

Julia M. Taylor, Lawrence J. Mazlack (2007) "Multiple Component Computational Recognition of Children's Jokes," *International Conference on Systems, Man and Cybernetics Proceedings*, pp. 1194-1199, Montreal, Canada, October 2007

Julia M. Taylor, Lawrence J. Mazlack (2007) "An Investigation into Computational Recognition of Children's Jokes," pp. 1904-1905, *22nd Conference on Artificial Intelligence*, Vancouver, Canada, July 2007

Julia M. Taylor, Lawrence J. Mazlack (2006) "Description Logic-Based Approximate Joke Comparison," *25th International Conference of the North American Fuzzy Information Processing Society*, pp. 311-316, Montreal, Canada, June 2006

Julia M. Taylor, Lawrence J. Mazlack (2005) "Toward Computational Recognition of Humorous Intent," *Cognitive Science Conference 2005,* pp. 2166-2171, Stresa, Italy, July 2005

Julia M. Taylor, Lawrence J. Mazlack (2005) "Focused Statistical Joke Generation," *2005 International Conference on Artificial Intelligence*, 6pp., Las Vegas, NE, June 2005

Julia M. Taylor, Lawrence J. Mazlack (2005) "Approximate Joke Similarity," *24th International Conference of the North American Fuzzy Information Processing Society*, pp. 145-149, Ann Arbor, MI, June 2005

Julia M. Taylor, Daniel Poliakov, Lawrence J. Mazlack (2005) "Domain-Specific Ontology Merging for the Semantic Web" *24th International Conference of the North American Fuzzy Information Processing Society,* pp. 418-423, Ann Arbor, MI, June 2005

Julia M. Taylor, Lawrence J. Mazlack (2004) "Humorous Wordplay Recognition," *International Conference on Systems, Man and Cybernetics Proceedings*, pp.3305-3311, The Hague, The Netherlands, October 2004

Julia M. Taylor, Lawrence J. Mazlack (2004) "Computationally Recognizing Wordplay In Jokes," *Cognitive Science Conference Proceedings 2004,* pp. 1315-1321, Chicago, IL, August 2004

Short Abstracts of Conference Presentations:

Julia Taylor (2016) Computational Humor: Aligning Expectations and Reality. *2016 Annual Meeting of the International Society for Humor Studies—ISHS'16: International Conference on Humor Research*, Dublin, Ireland, June, 2016

Julia Taylor (2016) Response-based computational detection of humor. *2015 Annual Meeting of the International Society for Humor Studies—ISHS'15: International Conference on Humor Research*, Oakland, CA, June, 2015

Gilchan Park and Julia Taylor (2015) Syntactic Element Similarity for Phishing Detection. *36th IEEE Symposium on Security and Privacy,* San Jose, CA

J. M. Taylor (2014) "Beyond Canned Jokes: What Can OSTH Do", *2014 Annual Meeting of the International Society for Humor Studies—ISHS'14: International Conference on Humor Research*, Utrecht, Netherland, July 2014

J. M. Taylor (2013) "Making Computational Humor Even More Complex: Fuzzyfying GTVH", 2013 *Annual Meeting of the International Society for Humor Studies—ISHS'13: International Conference on Humor Research*, Williamsburg, Virginia, June 2013

V. Raskin & J.M. Taylor (2013) "Preface: Artificial Intelligence of Humor.-Computational Humor Technical Reports on the 2012 AAAI Fall Symposium Series." *AI Magazine*, 34:1, 94-95, 2013.

Julia M. Taylor (2012) "OSTH in Action: Comparison of 50 jokes," 2012 *Annual Meeting of the International Society for Humor Studies—ISHS'12: International Conference on Humor Research*, Krakow, Poland, June 2012

Julia M. Taylor (2011) "Does SO^2 always result in a joke: How long is long enough?" Symposium/Panel "On the length of jokes," *2011 Annual Meeting of the International Society for Humor Studies—ISHS'11: International Conference on Humor Research*, Boston, MA: Boston University, June 2011

Julia M. Taylor (2009) "SO in OSTH: Ontological Semantic View of Script Overlap/Oppositeness Support," Symposium "From SSTH to GTVH to OSTH—and never ever back!" *2009 Annual Meeting of the International Society for Humor Studies—ISHS'09: International Conference on Humor Research*, Long Beach, CA: University of California, June 2009

Julia M. Taylor, Lawrence J. Mazlack (2007) "Reverse Engineering Humor," *Cognitive Science Conference*, p. 1866, Nashville, Tennessee, August 2007 (1 page member abstract)

Julia M. Taylor, Lawrence J. Mazlack (2007) "Recognition of phonological children's jokes based on three components of computer processing," *2007 Annual Meeting of the International Society for Humor Studies—ISHS'07: International Conference on Humor Research*, Newport, RI: Salve Regina University, June 2007

Julia M. Taylor, Lawrence J. Mazlack (2005) "Computational Recognition of Humorous Intent," *2005 Annual Meeting of the International Society for Humor Studies—ISHS'05: International Conference on Humor Research*, Youngstown, OH: Youngstown State University, June 2005

Julia M. Taylor, Lawrence J. Mazlack (2004) "Computational Approach To Recognizing Wordplay In Jokes," *2004 Annual Meeting of the International Society for Humor Studies—ISHS'04: International Conference on Humor Research,* Dijon, France: Technical University of Dijon, June 2004

Invited Lectures, Panels and Seminars:

"Computer and human humor processing" Science on Tap lecture, Lafayette, Indiana, July 2015

"What Should We Know About Computational Humor" Tutorial at WorldComp 2015, Las Vegas, USA, July 2015

"What Can we learn from Computers' (Not) Understanding Humor?" Invited talk at Informatics Department, University of Minho, Braga, Portugal, March 2015

Panel member: "Cognitive Context: Information + Environment + Emotion + .. What Else?" *Conference on Advanced Cognitive Technologies and Applications*, IARIA, Nice, France, March 2015

"What can Ontology and Natural Language Do for Each Other?" Keynote address at KESW 2014, Kazan', Russia, October 2014

"Natural Language in Information Security and Privacy" (with V. Raskin), Tutorial at WorldComp 2014, Las Vegas, USA, July 2014

"Accessing Comprehensive Meaning in Information and Language Processing" (with V. Raskin), Tutorial at WorldComp 2013, Las Vegas, USA, July 2013

"Accessing Comprehensive Meaning in Information and Language Processing" (with V. Raskin), Tutorial at WorldComp 2012, Las Vegas, USA, July 2012

"OSTH at Work – Lessons Learned; Hopes Intact," Computational Humor Workshop, Amsterdam, Netherlands, June 2012

"Ontological Semantic Theory of Humor" (with Victor Raskin and Christian F. Hempelmann), Pre-Conference Tutorial at ISHS '12: International Conference on Humor Research, Krakow, Poland, June 2012

Towards Computing With Humor: Dream or Nightmare? Invited Seminar, University of Haifa, Haifa, Israel, April 2012

Understanding the Meaning of Information: Is There Light at the End of the Tunnel? *Invited seminar*, Technion: Israel Institute of Technology, Haifa, Israel, April 2012

What Can We Learn From Computer (Not) Understanding Humor, *Invited seminar*, Ben Gurion University, Beer Sheva, Israel, April 2012

"The Use of Natural Language Semantics in Medical Information," *3rd International Workshop on eHealth Data and Knowledge*, Kyung Hee University, Korea, March 2012

"HARMS: Networking and Communication to Enable Cooperative Robotics. Communication Layer," DGIST, Korea, March 2012

"Building Cyber-Physical Systems Using Robots' Worlds View: The HARMS Model Communication Layer," KAIST, Korea, March 2012

"What does it take to understand communication," In *Robot Ontology is NOT Ontology of Robotics: Enhancing HARMS Functionality Through Meaning-Based Communication LG seminar*, Seoul, Korea, March 2012

Short 9-hour course on Ontological Semantics (with Victor Raskin), CIC-IPN, Mexico City, Mexico, November 2011

"Two Alternative Approaches to Semantics in Natural Language Understanding" (with Victor Raskin and Christian F. Hempelmann), Workshop at the Society for Design and Process Science Conference, Jeju Island, South Korea, June 2011

"Traitor Tracing and Data Provenance" panel, Annual CERIAS Security Symposium, West Lafayette, Indiana, April 2011

"The Ontological Semantic Theory of Humor" (with Victor Raskin and Christian F. Hempelmann), keynote address, NETHRC 2011, Dallas, TX, January 2011

"Ontological Semantic Technology in Action" (with Victor Raskin and Christian F. Hempelmann), Department of Computer Science, Texas A&M University Commerce, January 2011

"The New Security Paradigm Experience" panel, Annual Computer Security Applications Conference, Austin, Texas, December 2010

"Ontological Semantic Technology for Detecting Insider Threat and Social Engineering" (with Victor Raskin), *Center for Education, Research in Information Assurance and Security seminar*, Purdue University, West Lafayette, Indiana, April 2010

"What Does It Take to Understand Humor… Computationally?" Mount Allison University, Sackville, New Brunswick, Canada, October 2009

Invited Contributions on Computational Semantics Support (with Victor Raskin), Workshop *A Research Agenda for Privacy and Security of Healthcare Technologies,* Institute for Pervasive Technologies, Indiana University, IUPUI Indianapolis, October 2009

"Formalizing the Unformalizable: The Linguistic View of Humor" (with Victor Raskin), University of Genoa, September 2009

"Recognizing Text Based Humor Through The Use Of Ontologies," *BISC seminar*, University of California, Berkeley, April 2009

"An Ontological Semantics Approach to Computational Humor," *Linguistic Lunch,* Purdue University, West Lafayette, Indiana, November 2008

"Understanding Medical Information in the Emergency Department: Approaches and Challenges," *Cincinnati Children's Hospital and Medical Center's Division of BioMedical Informatics Journal Club,* Cincinnati, Ohio, October 2008

"On Computational Detection of Humor," Cincinnati Programmers Guild, Cincinnati, Ohio, December 2007

"Analyzing Humor: A Fuzzy Theory," 5th International Summer School and Symposium on Humour and Laughter: Theory, Research and Applications, Tübingen, Germany, July 2005

"Statistics and Humor: Can You Count on It?" 5th International Summer School and Symposium on Humour and Laughter: Theory, Research and Applications, Tübingen, Germany, July 2005

Unrefereed Symposium Presentations:

Julia M. Taylor "Reverse Engineering Humor," *Ohio Graduate Student Symposium,* Cincinnati, Ohio, April 2007

Julia M. Taylor "Opening Computational Door on Knock Knock Jokes," *International Summer School and Symposium on Humour and Laughter: Theory, Research and Applications*, Wolverhampton, UK, September 2004

Julia M. Taylor "Statistical Joke Recognition," International Summer School and Symposium on Humour and Laughter: Theory, Research and Applications, Edinburgh, Scotland, September 2003

Posters/Presentations Without Publication:

"Variable Ontological Semantic Properties of Noun Meanings Across American English Dialects" (with Victor Raskin and Nicole R. Holliday), SROP, Graduate School, Purdue University, W. Lafayette, IN, July 2009

"Computationally Recognizing Wordplay in Jokes", University of Cincinnati Showcase, Cincinnati, OH, April 2006

"Computational Recognition of Humor in Text," Graduate Fair, University of Cincinnati, Cincinnati, OH, November 2005

TEACHING & MENTORING EXPERIENCE:
Mentoring:
Chair, PhD Dissertation Advisory Committees:
- Gilchan Park (PhD expected May 2017)

Co-Chair, PhD Dissertation Advisory Committees:
- Galina Miller (PhD May 2016), dissertation "Using Information Technology to Improve Policies Impacting Elementary School Absenteeism Due to Influenza"
- Courtney Falk (PhD expected August 2016)
- Samaya Daoud (PhD expected August 2016)

Member, PhD Dissertation Advisory Committees:
- Yongho Kim (PhD expected May 2017)
- Daniel Schrader (PhD expected May 2017)
- Amy Wagoner (PhD expected May 2017)
- Shruti Gupta (PhD expected August 2016)
- Filipo Sharevski (PhD December 2015), dissertation "The Impact of Mobile Network Forensics Evidence on the Criminal Case Processing Performance in Macedonia: An Institutional Analysis Study"
- Byung-Cheol Min (PhD May 2014), dissertation: "Optimizing Self-organizing, Large-scale, Mobile Robotic Broadband Networks," Purdue University
- Jonathan Dunn (PhD December 2013), dissertation: "Ontological Semantics of Metaphors," Purdue University

- Whitney R. Vandiver (PhD, May 2011), dissertation: "The Ontological Semantics of English Quantifiers," Purdue University
- Naser Naif AlBzour (PhD, May 2011), dissertation: "Semio-Pragmatic Analysis of Cartoons Discourse: a Step towards Semiotranslation," Purdue University
- Baseel A. AlBzoor (PhD, May 2011), dissertation: "Semantic and Pragmatic Failure in Translating Literary Texts: Translators' Inconsistencies and/or Textual Resistance," Purdue University

Chair, Master's Theses Advisory Committees
- Pai-ying Hsiao (MS expected May 2017)
- Xiaonan Jing (MS expected May 2017)
- Robert Hind (MS expected August 2016)
- Shih-Feng Yang (MS expected August 2016)
- Louis Hickman (MS August 2015)
- Tatiana Ringenberg (MS May 2015)
- Gilchan Park (MS December 2014)

Co-Chair, Master's Theses Advisory Committees:
- Ji Hyeon Hong (MS August 2013), Purdue University
- Zexing Luo (MS August 2013), Purdue University

Member, Master's Theses Advisory Committees:
- Sangmi Shin (MS May 2016), Purdue University
- Dheeraj Gurugubelli (MS expected August 2015), Purdue University
- Eric Poremski (MS August 2015), Purdue University
- Yuanhsin Huang (MS May 2015), Purdue University
- Amy Wagoner (MS May 2014), Purdue University
- Saltanat Tazhibayeva (MS May 2014), Purdue University
- Miran Kim (MS May 2013), Purdue University
- Sherry Wei (MS May 2013), Purdue University
- Lauren Stuart (MS December 2012), Purdue University
- Nikita Atal (MS August 2012), Purdue University
- Manoj Penmetcha (MS August 2012), Purdue University

Undergraduate supervision:
- Miranda Lung (2016) project "Graph-based processing of natural language" NSF Research Experience for Undergraduates
- Ben Mollet (2015) project "Human Friendly OST for medical domain" NSF Research Experience for Undergraduates (with Victor Raskin)
- Mercedes Hohenberger (2015) project "NL medical anonymization" NSF Research Experience for Undergraduates (with Victor Raskin)
- Douglas Brian Shaffer (2014) project: "Automating Behavioral Script Detection and Creation" NSF Research Experience for Undergraduates (with Victor Raskin; PI: Melissa Dark)
- Matthew Barba-Rodriguez (2014) project: "Detecting Deceptive Patterns in Phishing Emails" NSF Research Experience for Undergraduates (with Victor Raskin; PI: Melissa Dark)

- Anna Yesypenko (2014) project: "NL IAS Automatic Text Summarization" NSF Research Experience for Undergraduates (with Victor Raskin; PI: Melissa Dark)
- Elizabeth Rutherford (2013) project: "Sarcasm Detection in Speech Recognition" (with Victor Raskin), was accepted at 4th Humor Research Conference 2014
- Angela Graci (2013), project: "Novelty Detection Using Ontological Semantics," Research Experience for Undergraduates (with Victor Raskin; PI: Melissa Dark)
- Matthew Loria (2013), project: "The Novelty of Text-Based Jokes," Research Experience for Undergraduates (with Victor Raskin; PI: Melissa Dark)
- Aurelio Arango (2013), project: "Verb-Based Novelty Detection," Research Experience for Undergraduates (with Victor Raskin; PI: Melissa Dark)
- Mindaugas Indriūnas (2012), project: "Mereological Considerations for Improving Semantic Ontology," PULSe program, one Lab rotation
- David Hersh (2012), project: "Meaning-based Textual Novelty Detection," Research Experience for Undergraduates (with Victor Raskin; PI: Melissa Dark)
- Shauna Soto (2012), project: "Schema and Script Based Analysis To Identify Spam Email Attacks," Research Experience for Undergraduates (with Victor Raskin; PI: Melissa Dark)
- Namarta Kumar (2012), project: "Morpological Analysis for Noun, Verb, and Adjective", Research Experience for Undergraduates (with Victor Raskin; PI: Melissa Dark)
- Nicole R. Holliday (2009), project: "Variable Ontological Semantic Properties of Noun Meanings Across American English Dialects," Summer Research Opportunity Program

Teaching:

Purdue University:
- CNIT 623: Natural Language and Information Assurance and Security (new course)
- CNIT 499: Natural Language Technologies (new course)
- CNIT 481: (new course) Cognitive Computing with Natural Language
- CNIT 581: CIT Graduate Seminar (new course, with Melissa Dark)
- CNIT 315: System Programming
- CNIT 325: OO Application Development
- CNIT 392: Enterprise Data Management
- CNIT 372: Database Programming
- ENGL 628/LING 689N: Natural Language Processing (with Victor Raskin)
- ENGL 627H/LING 689H: Computational Humor (with Victor Raskin)
- ENGL 627/LING 689: Ontological Semantic Theory of Humor (with Victor Raskin)
- LING 593: Natural Language Knowledge Representation (with Victor Raskin)
- LING 593: Ontological Semantics I (with Victor Raskin)
- LING 593: Ontological Semantics II (with Victor Raskin)
- LING 593: Ontological Semantics III (with Victor Raskin)
- ENGL 511/LING 531: Semantics (with Victor Raskin)
- ENGL 506/LING 500: Introduction to Linguistics (with Victor Raskin)

- ENGL 227H/LING 201H: Elements of Linguistics, Honors (with Victor Raskin)
- ENGL 227/LING 201: Elements of Linguistics (with Victor Raskin)

University of Cincinnati, Teaching Assistant (for: Lawrence Mazlack, Carla Purdy, Karen Davis, B. J. Jabbari) or Volunteer Assistant (for Lawrence Mazlack):
- ECEE 717: Intelligent Knowledge Representation
- ECES 651: Database Theory (5 times)
- ECEE 610: Database Management Theory (twice)
- ECES 592: Database Design
- ECES 495: Software Engineering Lab
- ECES 493: Software Engineering
- ECES 229: Software Development

PROFESSIONAL SERVICE:
Committee assignments in the Department, College, and/or University:
Election Committee, CIT, 2014-2016
Diversity Ad-hoc Committee, CIT, 2014-2016
Graduate Education Committee member, CIT, 2014-2016
Faculty Grievance Committee, CoT, 2014-2015
Faculty Search Committee, CIT, 2012-2013, 2015-2016

Appointments:
Special session co-organizer, *Computing with Words and Beyond*, NAFIPS 2016.
Program Committee Member, *Communication for Humans, Agents, Robots, Machines and Sensors Workshop* 2015, 2016
Program Committee Member, Int. Workshop on Biometric Security, 2015, 2016
Program Committee Member, Adaptive Systems, Intelligent Computing and Applications @ EUSPN-2016
Program Committee Member, *Cognitive* 2015
Associate Technical Program Co-Chair, *ICARA* 2015
Program Committee Member *ICCM* 2012, 2013, 2015, 2016
Program Committee Member, *2nd International Workshop on Biometrics and CyberSecurity'15* in conjunction with ACM/IEEE International Conference on CyberWorlds CW 2015
Program Committee Member, 2016 *8th Russian Conference on Knowledge Engineering and Semantic Web*
Program Committee Member, 2015 *7th Russian Conference on Knowledge Engineering and Semantic Web*, Russia
Program Committee Member, 2014 *6th Russian Conference on Knowledge Engineering and Semantic Web*, Kazan, Russia
Co-Organizer (with Victor Raskin) *Symposium on Computational Humor 2014* (in conjunction with *4th Humor Research Conference*), Dallas, Texas, 2014
Exhibition Chair, *International Conference on Robot Intelligence Technology and Applications* 2013, Denver, Colorado, 2013
Program Committee Member, Sensing, Reasoning and Actuation in Ubiquitous Systems and Cloud Robotics @ EUSPN-2013
Program Committee Member, 2013 *5th Russian Conference on Knowledge Engineering*

and Semantic Web, St. Petersburg, Russia

Co-Chair, *Fall 2012 Symposium on Artificial Intelligence of Humor*, at AAAI Fall Symposium Series, Washington, DC, 2012

Program Committee Member, *International Conference on Robot Intelligence Technology and Applications 2012*, Gwangju, South Korea, 2012

Program Committee Member, *4th Russian Conference on Knowledge Engineering and Semantic Web*, St. Petersburg, Russia

Session organizer, *International Conference on Robot Intelligence Technology and Applications 2012*, Gwangju, South Korea, 2012

SDPS Next Generation Leadership Team

Consulting Board member, *HUMOR: International Journal of Humor Research*

Board member, *The European Journal of Humour Research*

Reviewer, NSF panel, May and November 2012, April 2014, February 2015, March 2016

Session Co-organizer (with John Carbone, James Crowder, Victor Raskin), *Sensors and Sensory Perception Technologies for Next Generation Complex Systems*, SDPS 2012

Lead Co-organizer (with Victor Raskin and Eugene H, Spafford), *Web Intelligence for Information Security Workshop* (competitive selection), at WI/IAT 2011

Session Organizer, *Intelligence is Fuzzy: Ontology-based Agents* (invited), at SDPS 2011

Reviewer, *Natural Language Engineering Journal*

Reviewer, *Cognitive Science Journal*

Reviewer, *Computers and Security Journal*

Reviewer, *Transactions on Information and System Security Journal*

Reviewer, *IEEE Computational Intelligence Magazine Special Issue on Affective Computing*

Reviewer, *SDPS Transactions: Journal of Integrated Design and Process Science*

Reader, 2007 - 2009, *HUMOR: International Journal of Humor Research*

Reviewer, numerous conferences

Grants:

International (S. Korea)/K-SW Square (PI: E. Matson): Total amount of award: $1,814,999.98. (current)

Industry/Covance (PI: J. Taylor). Total amount of award: $10,000. (current)

NSF/Collaborative Research: I/UCRC for Robots and Sensors for the Human Well-being (PI: E. Matson). Total amount of award: $325,000. (current)

NSF/Support for student participation in a 2012 AAAI Fall Series Symposium (PI: V. Raskin) Total amount of award: $12,000.

NSF/TC: Large: Collaborative Research: Anonymizing Textual Data and its Impact on Utility. (PI: Clifton, Si, Raskin during various times). Total amount of award: $1,554,441. (current)

NSF/REU Supplement: TC: Large: Collaborative Research: Anonymizing Textual Data and its Impact on Utility (PI: Raskin). Total amount of award: $16,000. (current)

PRF Summer Faculty Grant: Applying Ontological Semantic Technology to Assist in Coding Transcripts of Physician-Patient Communication in Cancer Treatment. (PI: J. Taylor). $8,000. (2015)

CoT Research Grant "In Search of Implicit Meaning in Domain of Military and Intelligence Communication" (PI: J. Taylor) Total amount of award: $22,000. (August 2014 - August 2015)

PRF Research Grant "Towards Semantic-based Phishing Detection" (PI: J. Taylor) Total amount of award: $17,241. (August 2013 – May 2014)

Awards:
Exceptional Early Career for Undergraduate Teaching, PPI, 2016
Supervised FLAIRS best student paper nominee, 2016
CIT Outstanding Faculty in Discovery, 2014-2015
Keynote address at KESW 2014 "What Can Ontology and Natural Language Do For Each Other"
IEEE ICCI*CC best paper award, 2014
WorldComp 2012, 2013, 2014, 2015 Achievement Award
Elected Fellow, CERIAS, April 2012
NAFIPS Best Student Paper finalist, 2008
Ohio Board of Regents Distinguished Doctoral Research Fellowship in Computer Science and Engineering, 9/2005-6/2008
University of Cincinnati Graduate Scholarship, 9/2004-6/2008
Rindsberg Fellowship, 2007-2008
AAAI Travel Grant, 2007
CogSci Student Travel Grant, 2005
IEEE SMC Student Travel Grant, 2004
International Society of Humor Studies Emerging Scholar Award, 2004

Professional Societies
Association for the Advancement of Artificial Intelligence (AAAI)
Association for Computing Machinery (ACM)
Cognitive Science Society (CogSci)
Institute of Electrical and Electronic Engineers (IEEE)
IEEE Computational Intelligence Society
IEEE Systems, Man and Cybernetics Society
International Society for Humor Studies (ISHS)
North American Fuzzy Information Processing Society (NAFIPS)
Society for Design and Process Science (SDPS)