

**CURRY I. GUINN**

Department of Computer Science  
University of Colorado Boulder  
1111 Engineering Dr.  
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Curry.Guinn@colorado.edu (work)  
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**EDUCATION**

PhD, Duke University, 1994  
Major: Computer Science  
Dissertation Title: Meta-Dialogue Behaviors: Improving the Efficiency of Human-Machine Dialogue  
Advisor: Alan Biermann  
Committee Members: Don Loveland, John Reif, Gopalan Nadathur, Randall Hendricks

MS, Duke University, 1990  
Major: Computer Science  
Dissertation Title: A Mechanism for Processing Argumentative Discourse  
Advisor: Alan Biermann

BS, *Summa Cum Laude*, Virginia Polytechnic Institute and State University, 1988  
Major: Computer Science  
2<sup>nd</sup> Major: Philosophy  
Minor: Mathematics

**PROFESSIONAL EXPERIENCE**

ASSOCIATE TEACHING PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE, UNIVERSITY OF COLORADO BOULDER (2024-PRESENT)

**Associate Faculty Director of Student Experience in the Applied Computer Science Program,**  
Department of Computer Science (2025-present).

PROFESSOR, UNIVERSITY OF NORTH CAROLINA AT WILMINGTON

**Professor,** Department of Computer Science at UNC-Wilmington (2015-2024).

**Chair** of the Department of Computer Science at UNC-Wilmington (2017-2021).

**Associate Professor,** Department of Computer Science at UNC-Wilmington (2011-2015).

**Assistant Professor**, Department of Computer Science at UNC-Wilmington (2004-2011).

PRINCIPAL INVESTIGATOR, RTI INTERNATIONAL

Principal Investigator at RTI (formerly, Research Triangle Institute) (1995-2004).

ADJUNCT ASSISTANT PROFESSOR, DUKE UNIVERSITY

Instructor and advisor in the Department of Computer Science at Duke University (1994-2004).

## **HONORS**

### **Academic**

James B. Duke Fellow, Duke University.

Outstanding Lower Division Student, Department of Computer Science, Virginia Polytechnic Institute and State University.

Collegiate Academic All-American, United States Achievement Academy.

Golden Key International Honor Society.

Phi Beta Kappa.

Upsilon Pi Epsilon, International Honor Society for the Computing and Information Disciplines.

Phi Eta Sigma.

### **Teaching and Mentorship**

2024 Faculty Advisor of the Year award from UNCW's Campus Activities and Involvement Center.

Discere Aude Award for Outstanding Mentorship of Undergraduate Students, UNCW.

### **Professional**

Circle of Champions for Innovative Marketing Excellence, RTI International (formerly Research Triangle Institute).

**COURSES TAUGHT****Duke University (1995-2002)**

CPS 97: Minds and Computers, 1 section  
 CPS 170: Methodologies in Artificial Intelligence, 2 sections

**University of North Carolina Wilmington (2004-2024)**

CSC 100, "Orientation to Computer Science," 6 sections  
 CSC 110, "Fluency in Information Technology," 3 sections  
 CSC 112, "Introduction to Computer Programming (C++)," 1 section  
 CSC 121, "Introduction to Computer Science I (Java)," 9 sections  
 CSC 131, "Introduction to Computer Science I (Python), 3 sections  
 CSC 133, "Discrete Mathematics," 2 sections  
 CSC 221, "Introduction to Computer Science II," 11 sections  
 CSC 231, "Introduction to Data Structures," 9 sections  
 CSC 331, "Object-Oriented Programming and Design," 4 sections  
 CSC 332, "Data Structures," 9 sections  
 CSC 360, "Formal Languages and Computability," 10 sections  
 CSC 380, "Design and Analysis of Algorithms," 10 sections  
 CSC 385, "Professional and Ethical Issues in Computer Science", 3 sections  
 CSC 415, "Artificial Intelligence," 1 section  
 CSC 433, "Natural Language Processing", 1 section  
 CSC 450, "Software Engineering," 2 sections  
 CSC 475, "Special Topics in Computer Science: Natural Language Processing," 5 sections  
 CSC 491, "Directed Individual Study," 8 sections  
 CSC 499, "Honors Thesis in Computer Science," 6 sections  
 CSC 517, "Symbolic Artificial Intelligence," 3 sections  
 CSC 532, "Design and Analysis of Algorithms," 2 sections  
 CSC 591, "Directed Individual Study," 1 section  
 CSC 592, "Natural Language Processing," 4 sections  
 CSC 594, "Research Project," 6 sections  
 CSC 599, "Thesis," 4 sections  
 HON 210, "The Two Codes: The U.S. Constitution and Computing", 1 section

**University of Colorado Boulder (2024-2026)**

CSPB 2270, Introduction to Computer Science II, 5 sections  
 CSPB 3112, Professional Development in Computer Science, 4 sections  
 CSPB 3308, Software Development Methods and Tools, 1 section  
 CPSB 3832, Natural Language Processing, 3 sections  
 CSPB 4870, Special Topics in Computer Science, 1 section

## RECENT COURSES/STUDENT EVALUATION SCORES

Semester	IDEA (Campus Labs/Anthology) Student Evaluations for Course University of North Carolina Wilmington	Q: Overall, I rate this instructor an excellent teacher.	Computer Science Department Average
Fall 2014	CSC 360 – Formal Languages and Computability	5.0	4.01
	CSC 331 – Object-Oriented Programming & Design	5.0	4.01
	CSC 331 – Object-Oriented Programming & Design	4.5	4.01
Spring 2015	CSC 331 – Object-Oriented Programming & Design	5.0	4.13
	CSC 331 – Object-Oriented Programming & Design	4.91	4.13
	CSC 450 – Software Engineering	5.0	4.13
Fall 2015	CSC 331 – Object-Oriented Programming & Design	4.83	4.03
	CSC 331 – Object-Oriented Programming & Design	4.86	4.03
Spring 2016	CSC 360 -- Formal Languages and Computability	4.87	4.0
	CSC 450 – Software Engineering	4.94	4.0
	CSC 475 – Natural Language Processing	4.95	4.0
Summer 2016	CSC 385 -- Professional and Ethical Issues in Computer Science	5.0	4.53
	CSC 385 -- Professional and Ethical Issues in Computer Science	4.62	4.53
Fall 2016	CSC 231 – Introduction to Data Structures	5.0	4.06
	CSC 231 – Introduction to Data Structures	5.0	4.06
	CSC 231 – Introduction to Data Structures	4.88	4.06
Spring 2017	CSC 231 – Introduction to Data Structures	4.94	4.12
	CSC 231 – Introduction to Data Structures	4.84	4.12
Fall 2017	CSC 131 – Introduction to Computer Science	4.53	3.99
Spring 2018	CSC 380 – Design and Analysis of Algorithms	4.81	4.13
Fall 2018	CSC 131 (Honors) – Introduction to Computer Science	4.50	N/A
Spring 2019	CSC 380 – Design and Analysis of Algorithms	5.0	3.96
Fall 2019	CSC 380 – Design and Analysis of Algorithms	4.75	4.06
Spring 2020	CSC 380 – Design and Analysis of Algorithms (hybrid)	4.89	N/A
	HON 120 – The Two Codes: The U.S. Constitution and Computing (hybrid)	N/A	N/A
Fall 2020	CSC 380 – Design and Analysis of Algorithms (online)	4.80	4.22
Spring 2021	CSC 380 – Design and Analysis of Algorithms (online)	4.81	4.20
Fall 2021	CSC 231 – Introduction to Data Structures (online)	4.63	4.15
	CSC 380 – Design and Analysis of Algorithms (online)	4.67	4.15
	CSC 380 – Design and Analysis of Algorithms (online)	4.48	4.15
Spring 2022	CSC 231 – Introduction to Data Structures (online)	4.61	4.22

	CSC 380 – Design and Analysis of Algorithms (online)	4.88	4.22
	CSC 380 – Design and Analysis of Algorithms (online)	4.95	4.22
Fall 2022	CSC 231 – Introduction to Data Structures (online)	4.72	4.19
	CSC 360 – Formal Languages and Computability (online, X 2)	4.6	4.19
Spring 2023	CSC 360 – Formal Languages and Computability	4.92	4.29
	CSC 360 – Formal Languages and Computability	4.8	4.29
	CSC 532 – Design and Analysis of Algorithms (Graduate)	4.7	4.29
Fall 2023	CSC 360 – Formal Languages and Computability	4.58	4.18
	CSC 360 – Formal Languages and Computability	4.84	4.18
	CSC 433 – Natural Language Processing	5.0	4.18
<b>University of Colorado Boulder</b>			
	<b>Faculty IDEA</b>	<b>In this course, the instructor: Maintained a helpful online presence throughout each week of the course.</b>	<b>In this course, the instructor: Was invested in my success throughout the course.</b>
Fall 2024	CSPB 2270 – Computer Science II: Data Structures	4.94	4.94
	CSPB 2270 – Computer Science II: Data Structures	4.57	4.57
Spring 2025	CSPB 2270 – Computer Science II: Data Structures	4.94	4.79
	CSPB 3112: Professional Development in Computer Science	5.0	5.0
	CSPB 4830: Special Topics in Computer Science (NLP)	4.96	4.96
Summer 2025	CSPB 3112: Professional Development in Computer Science	5.0	5.0
	CSPB 3832: Natural Language Processing	4.71	4.71
Fall 2026	CSPB 2270 – Computer Science II: Data Structures	5.0	5.0
	CSPB 3112: Professional Development in Computer Science	5.0	5.0
	CSPB 3832: Natural Language Processing	5.0	5.0

**GRANTS**

Guinn, C.I. Contract, "Artificial Intelligence and Natural Language Processing for Advanced Tactical Decision-Making Immersive Training", RTI International, \$100,156, Funded. (start: September 16, 2019, end: October 31, 2023).

Guinn, C. I., Contract, "STENO: Mobile App for Classroom Discussion", University of North Carolina Wilmington, \$9,974.00, Funded. (start: August 1, 2016, end: December 31, 2016).

Ricanek, K., Guinn, C. I., Grant, "CASIS Summer 2016", Central Intelligence Agency, Federal, \$25,000.00, Funded. (start: July 2016, end: September 2016).

Guinn, C. I., Contract, "Mixed Initiative Spoken Dialogue Control", Honeywell, Inc., Private, \$98,000.00, Awarded. (start: April 1, 2015, end: March 30, 2016).

Guinn, C. I., Natural Language Processing for Longitudinal Exposure Data, RTI International, Original Source of Funds: Environmental Protection Agency, August 1, 2004 – March 31, 2008, \$29,586.00.

Guinn, C. I., Agent-Based Computing Machine, Lexxle Inc. 2007-2008, \$24,964.00.

Guinn, C. I., CAS Summer Research Award, University of North Carolina Wilmington, 2005. \$3500.00.

Guinn, C. I., Responsive Virtual Human Technology Research, National Science Foundation, #EIA-0121211, September 2001-August 2004, \$ 2,042,547.00.

**STUDENT MENTORSHIP**

Taylor, C., Undergraduate Honors Thesis Committee **Chair**, Computer Science Department, CSC, 499, "Bluff, Banter, and Bots: Unmasking AI Personalities in a Social Experiment", In-Process. (August 2023 - May 2024).

Karels, M., Master's Committee **Chair**, Computer Science Department, "Harnessing ChatGPT-4 Turbo: Optimizing Real-time and Historical Data Integration for Accurate NFL Quiz Question Generation", Completed. (January 2023 - March 2024).

Muli, M., Master's Committee Member, Computer Science Department, "Feed Cape Fear - Empowering Communities Through Comprehensive Engagement and Food Distribution", In-Process. (August 2023 - May 2024).

Hernandez, T., Master's Committee Member, Computer Science Department, "Comparative Analysis of OCR Services in Automated Text Extraction", In-Process. (August 2023 - May 2024).

Monschein, C., Undergraduate Honors Thesis Committee Member, Computer Science Department, CSC, 499, "Designing, Implementing, and Evaluating a Performance Dashboard for the Cary/Apex Water Treatment Facility", Completed. (August 2023 - April 2024).

Schneiderei, L., Master's Committee **Chair**, Computer Science Department, CSC, 594, "Scientific Database Management System for Biological Specimens", Completed. (January 2023 - December 2023).

Moreau, M., Undergraduate Honors Thesis Committee **Chair**, Computer Science Department, CSC, 499, "Counteracting the Negative Effects of Social Media", Completed. (January 2023 - December 2023).

Samokhvalov, I., Master's Committee Member, Computer Science Department, " Detecting Shifts in the Performance of the Sentiment Classification Algorithm Using Twitter Feed Related to a Public Company.", In-process. (August 17, 2021 – May 12, 2022).

Kushnour, K., Master's Committee **Chair**, Computer Science Department, "Flashcard Website Powered by Alexa", Completed. (January 1, 2019 – December 12, 2019).

Suggs, M., Undergraduate Honors Thesis Committee **Chair**, Computer Science Department, CSC, 499, 6 credit hours, " Automated Neuron Recognition and Counting Using Computer Vision and Machine Learning Techniques", Completed. (August 15, 2017 - May 4, 2018).

Xiao, Y., Master's Committee **Chair**, Computer Science Department, "A Comparison of N-grams vs. Recurrent Neural Networks for Processing Degraded Text", Completed. (January 2016 – December 2017).

Harman, A., Undergraduate Honors Thesis Committee Member, Computer Science Department, CSC, 499, 6 credit hours, "Exploring Commonly Used Software Engineering Processes", Completed. (August 15, 2016 - May 4, 2017).

- Stroud, B., Master's Committee Member, Computer Science Department, "Evaluation of Development Tools for Creating Mobile Applications", Completed. (August 2015 - May 2016).
- Monteleone, N., Master's Committee Member, Computer Science Department, "An Analysis of Data Warehouse Models on the Salesforce Platform", Completed. (August 2015 - May 2016).
- Polk, W., Undergraduate Honors Thesis Committee Member, Public & Internat'l Affairs Department, "Accountability in the Internet Engineering Task Force", Completed. (August 2015 - May 2016).
- Georgiou, J., Undergraduate Honors Thesis Committee **Chair**, Computer Science Department, CSC, 499, 6 credit hours, "Wearable Computing: Application Development and User Studies with Google Glass", Completed. (August 2014 - May 2015).
- Tran, V., Master's Committee **Chair**, Computer Science Department, CSC, 592, 3 credit hours, "An Application of Knowledge Discovery in Text Databases", Completed. (August 2013 – May 2015).
- Jazmin, C., Master's Committee Member, Computer Science Department, MIS, 594, 3 credit hours, "Robots and Competition: Developing a Nonprofit to Support and Sustain Fun STEM Education", Completed. (April 30, 2015).
- Wallace, H., Directed Individual Study, Computer Science Department, CSC, 498, 3 credit hours, "intelligent Spoken Language Assistant for Smart Homes (iSLASH)", Completed. (August 2014 - December 2014).
- Grimsman, A., Master's Committee Member, Computer Science Department, CSC, 594, 3 credit hours, "Literary Analysis Tool: Text Analytics in a Creative Writing Context", Completed. (August 2013- December 2014).
- Bowman, K., Undergraduate Honors Thesis Committee Member, Physics & Physical Oceanography Department, PHY, 499, 6 credit hours, "An Open Source Alternative to Expensive Laster Direct Imaging Systems", Completed. (January 2014 - December 2014).
- Wallace, H., Directed Individual Study, Computer Science Department, CSC, 498, 3 credit hours, "intelligent Spoken Language Assistant for Smart Homes (iSLASH)", Completed. (August 2014 - December 2014).
- St. Laurent, B., Undergraduate Honors Thesis Committee Member, Physics & Physical Oceanography Department, PHY, 499, 6 credit hours, "The Construction of a Laser Engraver", Completed. (August 2013 - May 2014).
- Benjamin, S., Directed Individual Study, Computer Science Department, CSC, 491, 3 credit hours, "Models of Language Use of Persons with Alzheimer's Disease", Completed. (August 2013 - December 2013).
- Palmer, D., Master's Committee **Chair**, Computer Science Department, CSC, 599, 3 credit hours, "Computational Models of Familiar and Altruistic Behavior in Predator/Prey Environments", Completed. (January 2013 - December 2013).

- Brown, R., Master's Committee **Chair**, Computer Science Department, CSC, 599, "Development of a Novel Game with Adaptive Learning Agents", Completed. (January 2013 - December 2013).
- Martin, P., Master's Committee Member, Computer Science Department, CSC, 594, 6 credit hours, "Team Foundation Server: An Implementation of Microsoft's Team Foundation Server for Computer Programming Education", In-Process. (January 2011 - December 2013).
- Ambrose, Z., Directed Individual Study, Computer Science Department, CSC, 491, 3 credit hours, "Models of Language Use of Persons with Alzheimer's Disease", Completed. (August 2013 - November 2013).
- Lovette, T., Directed Individual Study, Computer Science Department, CSC, 491, 1 credit hours, "Project Linguist Video Search", Completed. (August 2012 - December 2012).
- Dunn, E., Master's Committee **Chair**, Computer Science Department, CSC, 594, 3 credit hours, "Computational Methods for Determining the Similarity Between Ancient Greek Manuscripts", Completed. (August 2012 - December 2012).
- Wilson, Z., Master's Committee Member, Info Systems & Operations Mgmt. Department, "Prophet Explorer: A Full-text Search MVC Application to Compare the Sayings of Religious Prophets", Completed. (June 2012 - December 2012).
- Habash, A., Master's Committee **Chair**, Computer Science Department, CSC, 594, 6 credit hours, "Language Analysis of Speakers with Dementia of the Alzheimer's Type", Completed. (August 2011 - April 27, 2012).
- Vandeventer, J., Master's Committee Member, Computer Science Department, CSC, 599, 6 credit hours, "Differentiating Duchenne from Non-Duchenne Smiles Using Active Appearance Models and the Facial Action Coding System", Completed. (April 20, 2012).
- Komisin, M., Master's Committee **Chair**, Computer Science Department, CSC, 599, 6 credit hours, "Identifying Personality Types Using Document Classification Methods", Completed. (August 2010 - July 22, 2011).
- Chivers, S., Master's Committee Member, Computer Science Department, CSC, 591, 3 credit hours, "Finding Minimal Cost Proofs for Cost-Based Abduction", Completed. (January 2010 - May 2010).
- Martin, J., Master's Committee Member, Computer Science Department, CSC, 591, 3 credit hours, "Suppressing Independent Loops in Packing/Unpacking Loop Nests", Completed. (January 2010 - May 2010).
- Jamieson, B., Undergraduate Honors Thesis, Computer Science Department, CSC, 499, 3 credit hours, "TuneToTab: From tune to tablature in real-time", Completed. (August 2009 - April 2010).
- Ratliff, M., Master's Committee Member, Computer Science Department, "Active Appearance Models for Emotion Recognition and Person Identification using Facial Expressions", Completed. (January 2007 - April 2010).

Harrison, R., Master's Committee **Chair**, Computer Science Department, CSC, 594, 3 credit hours, "A Low-Cost Tele-Operated Robotic Platform", Completed. (August 2009 - December 2009).

Vandeventer, J, Directed Individual Study, " Natural Language Interface to an Information Kiosk," Computer Science. (August 2009 - December 2009).

Nobles, Royce, Master's Committee **Chair**, Computer Science Department, "Evaluation of Enhanced Boolean Search Model with Spelling Correction and Concept-based Searching in a Data Entry Application," Completed. (January 2009 - August 2009).

Denning, J., Master's Committee Member, Computer Science Department, "A Quantitative Analysis of SQL Server 2008 Constructs", Completed. (August 2008 - April 2009).

Faggart, Bryson, Directed Individual Study, "Recommender Systems: Collaborative Filtering & Content-Based Recommending," Computer Science. (January 2008 - May 2008).

Harris, R., Undergraduate Honors Thesis Committee **Chair**, Computer Science Department, CSC, 499, 6 credit hours, " The TURBOCHARGE System: Translation Using Rule-Based Operations Combined with Hit-rate Analysis Results from Google™ Engine", Completed. (August 2007 - May 2008).

Renninger, R., Master's Committee Member, Computer Science Department, "Analysis and Implementation of a Financial Budgeting System", Completed. (August 2007 - April 2008).

Rawls, A., Master's Committee Member, Computer Science Department, "A Systematic Approach to Improving Predicted Arrival Time Using Historical Data", Completed. (August 2007 - April 2008).

Rayburn-Reeves, D., Master's Committee **Chair**, Computer Science Department, "Disambiguating Human Spoken Diary Entries Using Context Information", Completed. (August 2007 - April 2008).

Pollard, S., Ph.D. Committee Member, Computer Science Department, Duke University, "Defining the Complexity of Natural Language Dialogue System Domains", Completed. (August 2006).

Dawson, Deanna, Directed Individual Study, "Using Maya to Create Animated Emotionally Expressive 3D Characters," Computer Science. (January 2006 - July 2006).

Kelsey, Kimberly, Directed Individual Study, "Real-time Animation of 3D Virtual Characters," Computer Science. (May 2005 - June 2005).

Inouye, B., Ph.D. Committee Member, Computer Science Department, Duke University, "Automatic Optimization of Dialog Strategies Using a Theoretical Framework for Modeling Initiative in the Missing-Axiom Theory of Dialog", Completed. (December 2005).

Chai, Joyce, Ph.D. Committee Member, Computer Science Department, Duke University, "Learning and Generalization in the Creation of Information Extraction Systems", Completed. (1998).

## PUBLICATIONS

### Journal articles and Book Chapters

Guinn, C. (2018). Runaway AI. *Posthumanism: The Future of Homo Sapiens*, MacMillan Reference, USA.

Link, M., Armsby, P., Hubal, R. and Guinn, C. (2006). Accessibility and acceptance of responsive virtual human technology as a survey interviewer training tool, *Computers in Human Behavior* 22(3):412-426.

Hubal, R., Kizakevich, P, Guinn, C., Merino, K, and S. West (2000). The Virtual Standardized Patient–Simulated Patient-Practitioner Dialogue for Patient Interview Training. In J.D. Westwood, H.M. Hoffman, G.T. Mogel, R.A. Robb, & D. Stredney (Eds.), *Envisioning Healing: Interactive Technology and the Patient-Practitioner Dialogue (Studies in Health Technology & Informatics, v. 70)*. IOS Press: Amsterdam, 70:133-138.

Guinn, C. (1999) Evaluating Mixed-Initiative Dialog, *IEEE Intelligent Systems*, Volume 14, Number 5, pp. 21-23, 1999.

Guinn, C. (1998) An Analysis of Initiative Selection in Collaborative Task-Oriented Discourse, *User Modeling and User-adapted Interaction*, Vol 8(3-4):255-314. Also published in *Computational Models of Mixed-Initiative Interaction*, editors, S. Haller, S. McRoy, and A. Kobsa, Kluwer Academic Publishers, pp. 89-148, 1999.

Biermann, A., Fahmy, A., Guinn, C., Pennock, D., Ramm, D., and P. Wu (1995). A Computer animated system for demonstrating hardware and software principles, *Journal of Computing in Small Colleges*, vol. 10, no. 3, p. 34.

Guinn, C. (1994). Maximally Efficient Dialogue Mode Algorithm, in *Knowledge-Based Systems*, 7(4):277-8, December, 1994.

### Conference and Workshop Proceedings

Guinn, C., Assessing Author Personality Types Using ChatGPT. (2023). 25<sup>th</sup> International Conference on Artificial Intelligence, Las Vegas, USA.

Guinn, C., Limits of the Technology Singularity. (2020). Proceedings of FLAIRS-33. The International FLAIRS Conference Proceedings, 33.

- Layman, L. M., Guinn, C. I., Song, Y. (April (2nd Quarter/Spring) 2020). Toward Predicting Success and Failure in CS2: A Mixed-Method Analysis. Tampa, FL: ACMSE 2020: The Annual ACM Southeast Conference.
- Schulze S., Pence T., Irvine N., Guinn C. (2019) The Effects of Embodiment in Virtual Reality on Implicit Gender Bias. In: Chen J., Fragomeni G. (eds) Virtual, Augmented and Mixed Reality. Multimodal Interaction. HCI 2019. Lecture Notes in Computer Science, vol 11574. Springer.
- Kline, D., Grimsman, A., Vetter, R. and Guinn, C. (2019) Literary Analysis Tool: Text Analytics for Creative Writers. In: Proceedings of the Conference on Information Systems Applied Research, v. 12, n. 5213, Cleveland, Ohio.
- Guinn, C., Singer, B., and A. Habash (2014) A Comparison of Syntax, Semantics, and Pragmatics in Spoken Language among Residents with Alzheimer's Disease in Managed-Care Facilities, Proceedings of 2014 IEEE Symposium on Computational Intelligence in Healthcare and E-Health, IEEE, pp. 98-103.
- Brown, R. and C. Guinn (2014) Developing Game-Playing Agents That Adapt to User Strategies: A Case Study, Proceedings of 2014 IEEE Symposium on Intelligent Agents, IEEE, pp. 51-56.
- Guinn, C. and D. Palmer (2014) Human Perceptions of Altruism in Artificial Agents, Proceedings of 2014 IEEE Symposium Series on Intelligent Agents, IEEE, pp. 45-50.
- Dunn, E., & Guinn, C. I. (2013) Computational Methods for Determining the Similarity between Ancient Greek Manuscripts, Proceedings of International Conference on Artificial Intelligence, CSREA Press, Athens, GA, pp. 496-502.
- Guinn, C. I., & Habash, A. (2012) Language Analysis of Speakers with Dementia of the Alzheimer's Type, AAAI Press, Vol. FS-120-01.
- Komisin, M. and Guinn, C. (2012) Identifying Personality Types Using Document Classification Methods, Proceedings of the 25th International Florida Artificial Intelligence Research Society Conference (FLAIRS-25), AAAI Press.
- Green, N. L., Guinn, C., and R. W. Smith (2012). Assisting Social Conversation between Persons with Alzheimer's Disease and their Conversational Partners. Proceedings of the Third Workshop on Speech and Language Processing for Assistive Technologies, (part of NAACL-HLT 2012), Montreal, Canada, June 8, 2012, pages 37-46.

- Guinn, C. I. and *Daniel Rayburn-Reeves (2009). Remote Monitoring of Activity, Location, and Exertion Levels, Virtual Healthcare Interaction -- AAAI Fall Symposium*, ed. By N. Green and D. Scott, Technical Report FS-09-97, pp. 20-27.
- Guinn, C. I. (2009). A Hybrid AI Approach to the Classification of Emotive Text. Proceedings of 2009 International Conference on Artificial Intelligence (ICAI'09), July 2009.
- Rayburn-Reeves, D.. and C. Guinn (2008). Improving Upon Semantic Classification of Spoken Diary Entries Using Pragmatic Context Information, *Proceedings of the 2008 International Conference on Artificial Intelligence (ICAI'08)*, July 2008.
- Guinn, C., Shipman, W., and E. Addison (2008). The Parallelization of Membrane Computers to Find Optimal Solutions to Cost-Based Abduction, *Proceedings of the 2008 International Conference on Genetic and Evolutionary Methods (GEM'08)*, July 2008.
- Kline, D., Renninger, R, Sackley, W., Guinn, C., and G Scott (2008). An Information Technology Funding Process, *Proceedings of CONISAR 2008, Phoenix, AZ, 2008*; V.1 November.
- Guinn, C., Bullard, B., Rahiminejad, R., Harris, E., Shipman, W. and E. Addison (2007). Using Membrane Computers to Find Optimal Solutions to Cost-based Abduction *Parallel and Distributed Computing and Systems 2007*, Editor: S.Q. Zheng, Cambridge, MA, USA.
- Guinn, C.I. and D. Rayburn-Reeves (2007). Monitoring Physical Exertion, Activity, and Location Using a Spoken Diary and Heart Rate Monitor, *Proceedings of 3rd National Conference on Environmental Science and Technology*, Greensboro, NC, USA.
- Guinn, C., Crist, D, and H. Werth (2006). A Comparison of Hand-Crafted Semantic Grammars Versus Statistical Natural Language Parsing in Domain-Specific Voice Transcription, *Proceedings of Computational Intelligence*, Ed. B. Kovalerchuk, San Francisco, CA, pp. 490-495.
- Guinn, C. and R. Hubal (2006). Augmented Transition Networks (ATNs) for Dialog Control: A Longitudinal Study. *Proceedings of Computational Intelligence*, Ed. B. Kovalerchuk, San Francisco, CA, pp. 507-512.
- Guinn, C. and R. Hubal (2004). An Evaluation of Virtual Human Technology in Informational Kiosks, with R. Hubal, *Proceedings of International Conference on Multimodal Interfaces (ICMI '04)*, State College, PA.
- Hubal, R., Guinn, C., Sparrow, D., Studer, E., Day, R. and W. Visscher, (2004) A Synthetic Character Application for Informed Consent, In *Dialogue Systems for Health Communication: Papers from the 2004 Fall Symposium*, ed. Timothy Bickmore, 58-63. Technical Report FS-04-04. American Association for Artificial Intelligence, Menlo Park, California.

- Hubal, R., Guinn, C., Kizakevich, P., and G. Frank (2004) Psychologically plausible models that drive synthetic character behavior with applications for assessing interaction skills, *Workshop on Cognitive Systems: Human Cognitive Models in System Design*, Santa Fe, New Mexico, 2004.
- Guinn, C., Hubal, R., Frank, G., Schwetzke, H., Zimmer, J. Backus, S., Deterding, R., Link, M., Armsby, P., Caspar, R., Flicker, L., Visscher, W., Meehan, A., and H. Zelon (2004). Usability and Acceptability Studies of Conversational Virtual Human Technology, *5<sup>th</sup> SIGdial Workshop on Discourse and Dialogue*, Boston, MA.
- Hubal, R., Guinn, C., Frank, G., and R. Dupont (2004). Integrating a Crisis Stages Model into a Simulation for Training Law Enforcement Officers to Manage Encounters with the Mentally Ill, *Architectures for Modeling Emotion: Cross-Disciplinary Foundations, Technical Report SS-04-02*, pp. 68-69.
- Armsby, P, Link, M., Hubal, R. Guinn, C. Flicker, L. and R. Caspar (2003). Accessibility and Acceptance of a Virtual Respondent-Based Interviewer Training Application, *Survey and Statistical Computing IV. The Impact of Technology on the Survey Process*.
- Hubal, R. and C. Guinn (2003). Interactive Soft Skills Training using Responsive Virtual Human Technology, *Proceedings of the Interactive Technologies Conference*, Arlington, VA.
- Guinn, C. and R. Hubal (2003). Extracting Emotional Information from the Text of Spoken Dialog, *9<sup>th</sup> International Conference on User Modeling*, Johnstown, PA.
- Hubal, R. Guinn, C. and G. Frank (2003). Lessons learned in modeling schizophrenic and depressed responsive virtual humans for training, *Proceedings of the 2003 International Conference on Intelligent User Interfaces*, Miami, Florida, USA.
- Kizakevich, P., Lux, L., Duncan, S. and C. Guinn (2003). Virtual Simulated Patients for Bioterrorism Preparedness Training, *Proceedings of the 11<sup>th</sup> MMVR Conference*, Newport Beach, California.
- Frank, G, Guinn, C., and R. Hubal (2002). JUST-TALK: An Application of Responsive Virtual Human Technology, *Proceedings of the 24th Interservice/Industry Training, Simulation and Education Conference*.
- Link, M., Armsby, P, Hubal, R, and C. Guinn (2002). A Test of Responsive Virtual Human Technology as an Interviewer Skills Training Tool. *Proceedings of the 2002 Annual Conference of the American Association for Public Opinion Research*, St. Petersburg.
- Hubal, R., Frank, G, and C. Guinn (2000). AVATALK Virtual Humans for Training with Computer Generated Forces. *Proceedings of the Ninth Conference on Computer Generated Forces*. Institute for Simulation & Training: Orlando, FL, 2000.
- Chai, J., Biermann, A., and C. Guinn (1999). Two Dimensional Generalization in Information Extraction, *AAAI/IAAI*, pp. 431-438.

- Guinn, C. and J. Montoya (1997). Natural Language Processing in Virtual Reality Training Environments, in *Proceedings of the 19<sup>th</sup> Interservice/Industry Training, Simulation and Education Conference*.
- Biermann, A., Guinn, C., Fulkerson, M., Keim, G., Liang, Z., Melamed, D., and K. Rajagopalan, (1997) Goal-Oriented Multimedia Dialogue with Variable Initiative, in *International Symposium on Methodologies for Intelligent Systems*, pp. 1-16.
- Guinn, C. (1996). Mechanisms for Mixed-Initiative Human-Computer Collaborative Discourse, in *Proceedings of the 34<sup>th</sup> Annual Meeting of the Association for Computational Linguistics*, 1996.
- Guinn, C. (1996) Mechanisms for Dynamically Changing Initiative in Human-Computer Collaborative Discourse, in *Proceedings of the 1996 Human Interaction with Complex Systems Symposium*.
- Bagga, A., Chai, J., Biermann, A, Guinn, C., and A. Hui (1995). A Trainable System for the Extraction of Meaning from Text, in *Proceedings of CASCON '95*.
- Guinn, C. (1995) The Role of Computer-Computer Dialogues in Human-Computer Dialogue System Development, in *Empirical Methods in Discourse Interpretation and Generation*, Technical Report SS-95-06, The AAI Press.
- Biermann, A., Ramm, D., Guinn, C., Pennock, D., Fahmy, A, and P. Wu (1994). Visualizing Computation: Full Color and Motion Demonstration of Computer Mechanisms, *Proceedings of the Fifth National Conference on College Teaching and Learning*, Jacksonville, FL.
- Biermann, A, Guinn, C., Fahmy, A., Pennock, D., Ramm, D., and P. Wu (1994). Teaching a Hierarchical Model of Computation with Animation Software in the First Course, *'94 Bulletin*, 26(1):295-9.
- Guinn, C. (1993) A Computational Model of Dialogue Initiative in Collaborative Discourse, in *Human-Computer Collaboration: Reconciling Theory, Synthesizing Practice*, Technical Report FS-93-05, The AAI Press.
- Guinn, C. and A. Biermann (1993). Conflict Resolution in Collaborative Discourse, with Alan Biermann in *Computational Models of Conflict Management in Cooperative Problem Solving*, Workshop Proceedings from the 13th International Joint Conference on Artificial Intelligence, Chambéry, France.
- Biermann, A, Ramm, D, Fahmy, A., Guinn, C., and P. Wu (1993), The Visible Computer: A Fast Track to Understanding Computing, *Proceedings of Twenty-Third Annual Conference of Frontiers in Education Conference: Renewing America's Technology*, Washington, DC, pp. 67-69.
- Guinn, C. and A. Biermann (1993) A Computational Model of Collaborative Discourse, with Alan Biermann in *Collaborative Problem Solving: Theoretical Frameworks and Innovative Systems*, Workshop Proceedings from AI-ED 93 World Conference on Artificial Intelligence in Education, Edinburgh, Scotland.

Biermann, A., Guinn, C., Hipp, D., and R. Smith (1993). Efficient Collaborative Discourse: A Theory and its Implementation, *ARPA Workshop on Human Language Technology*, Princeton, NJ.

**Scholarly Magazine Articles**

Guinn, C. and J. Montoya (1998). Natural Language Processing in Virtual Reality, *Modern Simulation and Training*, pp. 44-55.

**Non-refereed Publications**

Guinn, C. (2004). Condensed General Science, Book Chapter, in Pearson, Hattikudur, and Hunt eds., *Condensed Knowledge*, HarperCollins, New York, pp. 87-106.

Guinn, C. (2000). 2050: The Future of Artificial Intelligence, in *Mental Floss*, Volume 1, Issue 1, pp. 15-17.

## PROFESSIONAL ORGANIZATIONS

Association for Computing Machinery.

IEEE Computer Society.

Sigma Xi, member, President, Secretary of local chapter.

Association for Computational Linguistics.

International Association of Science and Technology for Development.

American Association for Artificial Intelligence.

Special Interest Group in Dialogue Systems, AAAI.

## PROFESSIONAL SERVICE

Committee Member, The 36th International FLAIRS Conference, Clearwater Beach, Florida.

Reviewer, Ad Hoc Reviewer, *External Faculty Review (Promotion to Professor)*, Arizona.

Committee Member, Special Interest Group on Discourse and Dialogue (SIGdial).

Reviewer, Conference Paper, Association for Computational Linguistics.

Reviewer, Journal Article, *IEEE Computer Society*.

Reviewer, Conference Paper, Cognitive Science Society.

Committee Member, Special Interest Group in Dialogue and Discourse (SIGdial), Philadelphia, PA.

Reviewer, Conference Paper, Cognitive Science Society, Quebec City, Quebec.

Reviewer, Journal Article, *IEEE Computer Society*, Los Alamitos, CA.

Reviewer, Journal Article, *Ammons Scientific*, Missoula, MT.

Committee Member, Special Interest Group on Discourse and Dialogue.

Officer, President/Elect/Past, Sigma Xi, The Scientific Research Society, Wilmington, North Carolina.

Reviewer, Grant Proposal, American Institute of Biological Sciences (AIBS), Reston, VA.

Reviewer, Conference Paper, Association for the Advancement of Artificial Intelligence (AAAI).

Committee Member, Special Interest Group on Discourse and Dialogue, Metz, France.

Committee Member, Special Interest Group on Discourse and Dialogue, Seoul.

Reviewer, Journal Article, *Computers in Biology and Medicine*, Amsterdam, Netherlands.

Reviewer, Journal Article, *Computer Magazine*, Washington, DC.

Committee Member, Special Interest Group on Discourse and Dialogue, Portland, Oregon.

Reviewer, Ad Hoc Reviewer, *Association for Computational Linguistics Special Interest Group on Discourse and Dialogue*, Portland, Oregon.

Committee Member, Virtual Healthcare Interaction, AAAI 2009 Fall Symposium.

Reviewer, Conference Paper, 22nd International FLAIRS Conference.

Session Chair, 2008 International Conference on Genetic and Evolutionary Methods.