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Relevant Education

Ph.D. (Computer Science), 2002. The Graduate Center at the City University of New York

Master of Science (Computer Science) 1997. The City College of New York, School of Engineering

Master of Fine Art (Intermedia), 1992. The City College of New York, School of Fine Arts

Graduate (Clinical Adult) 2023. St Louis Psychoanalytic Institute

Publications

Google Scholar:
https://scholar.google.com/citations?user=sYF3eJkAAAAJ&hl=en&oi=ao

Refereed Journals (newest to oldest)

Note: Impact Factor (IF) is given as evaluated in the year of publication.

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112. Nanni, Loris, Paci, M., Santos, F. L. C. D., Brahnam, S., and Hyttinen, J. (2016). Review on texture descriptors for image classification. In S. Alexander (Ed.), *Computer Vision and Simulation: Methods, Applications and Technology*. Hauppauge, NY: Nova Publications.

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114. Nanni, Loris, Brahnam, Sheryl, and Maguolo, Gianluca (2019). "Data Augmentation for Building an Ensemble of Convolutional Neural Networks" In Yen-Wei Chen, Alfred Zimmermann, Robert J. Howlett, and Lakhmi C. Jain (Eds), **Smart Innovation, Systems and technologies: Innovation in Medicine and Healthcare Systems and Multimedia (vol 145)**, pp. 61-70. Singapore: Springer Nature.

115. Nanni, Loris, Pasquali, F., Brahnam, S., Lumini, A., and Axenopoulos, A. (2020). Convolutional Neural Networks for 3D Protein Classification. In L. Nanni, Brahnam, S., S. Ghidoni, R. Brattin and L. Jain (Eds.), **Deep Learners and Deep Learner Descriptors for Medical Applications**: Springer. Intelligent Systems Reference Library, vol 186. Springer

116. Nanni, Loris, Ghidoni, S., Brahnam, S., Lui, S., and Zhang, L. (2020) Ensemble of Handcrafted and Deep Learned Features for Cervical Cell Classification. In: Nanni L., Brahnam S., Brattin R., Ghidoni S., Jain L. (eds) Deep Learners and **Deep Learner Descriptors for Medical Applications**. Intelligent Systems Reference Library, vol 186. Springer, Cham.

117. Berno, Filippo, Nanni, Loris, Maguolo, Gianluca, and Brahnam, Sheryl. (2021) "Ensembles of Convolutional Neural Networks with Different Activation Functions for Small to Medium Size Biomedical Datasetsz." In *Machine Learning in Medicine*, edited by Ayman El-Baz and Jasjit S. Suri, page count: 21. Boca Raton: Chapman and Hall/CRC.

118. Nanni, Loris, Cuza, Daniela, Lumini, Alessandra, Brahman, Sheryl. "Data augmentation for deep ensembles in polyp segmentation" in IOP Publishing Bristol, United Kingdom on **Computational Intelligence based Solutions for Vision Systems** pp. 1-22. Edited by Varun Bajaj and Irshad Ahmad Ansari (2022).

119. Nanni, Loris, Cuza, Daniela, Lumini, Alessandra, Loreggia, Andrea, Brahman, Sheryl. "Polyp Segmentation with Deep Ensembles and Data Augmentation." In: Lim, CP., Vaidya, A., Chen, YW., Jain, T., Jain, L.C. (eds) Artificial Intelligence and Machine Learning for Healthcare. Intelligent Systems Reference Library, vol 228, pp. 133-153 Springer, Cham. https://doi.org/10.1007/978-3-031-11154-9_7_(2023).

120. Lumini, Alessandra, Nanni, Loris, Brahman, Sheryl. Pushing the Limits Against the No Free Lunch Theorem: Towards Building General-Purpose (GenP) Classification Systems. In: Virvou, M., Tsihrintzis, G.A., Jain, L.C.

(eds) Advances in Selected Artificial Intelligence Areas. Learning and Analytics in Intelligent Systems, vol 24. Springer, Cham https://doi.org/10.1007/978-3-030-93052-3_5 (2022).

Edited Books

121. Brahnam, Sheryl and Jain, Lakhmi (eds.), *Advanced Computational Intelligence Paradigms in Healthcare 5: Intelligent Decision Support Systems*, Springer-Verlag, Berlin (2010).
122. Brahnam, Sheryl and Jain, Lakhmi (eds.), *Advanced Computational Intelligence Paradigms in Healthcare 6: Virtual Reality in Psychotherapy, Rehabilitation, and Assessment*, Springer-Verlag, Berlin (2011).
123. Brahnam, Sheryl, Jain, Lakhmi, Lumini, Alessandra, and Nanni, Loris (eds.), *Local Binary Patterns: New Variants and New Applications*, Springer-Verlag, Berlin (2014).
124. Brooks, Anthony Lewis, Brahnam, Sheryl, and Jain, Lakhmi (eds.), **Medical technologies of Inclusive Well-Being: Serious Games, Alternative Realities, and Play Therapy**, Springer-Verlag, Berlin (2014).
125. Brooks, Anthony Lewis, Brahnam, Sheryl, Kapralos, Bill, and Jain, Lakhmi. **Recent Advances in Technologies of Inclusive Well-being: From Worn to Off-body Sensing, Virtual worlds, and Games for Serious Applications**, Springer-Verlag, Berlin (2017).
126. Maglogiannis, I., Brahnam, S., and Jain, L. C. (Eds.). **Advanced Computational Intelligence in Healthcare-7: Biomedical Informatics** (Vol. 891). Berlin: Springer-Verlag GmbH. (2020)
127. Nanni, Loris, Brahnam, S., Ghidoni, S., Brattin, R., and Jain, L. **Deep Learners and Deep Learner Descriptors for Medical Applications**: Intelligence Systems Reference Library (Vol. 186). Berlin: Springer. (2020).
128. Nanni, Loris, and Brahnam, Sheryl. **Biometric Systems**: Basel, Switzerland: MDPI AG (2021).
129. Brooks, Anthony Lewis, Brahnam, Sheryl, Kapralos, Bill, Nakajima, Amy, Tyerman, Jane, and Jain, Lakhmi C. (eds.), **Medical technologies of Inclusive Well-Being: Virtual Patients, Gamification, and Simulation**, Springer-Verlag, Berlin (2021).
130. Nayak, Janmenjoy, Das, Asit kumar, Naik, Bighnaraj, Meher, Saroj K., and Brahnam, Sheryl. **Nature-Inspired Optimization Methodologies in Biomedical and Healthcare**, Springer Nature, Berlin (2023).

Editor Special Journal Issues

131. Editor for the special issue on *Biometric Systems* with Nanni, Loris (2020), *Sensors* ((20): **IF: 3.031**.

132. Editor for the special issue on *Abuse and misuse of social agents* (with Angeli, Antonella De), *Interacting with computers*. 20(2) pp. 2-5 (2008) **IF: 1.225**.
133. Editor for the special issue on *Misuse and abuse of interactive technologies* (with Angeli, Antonella De, Christoph Bartneck, and Catherine Pelachaud), *Interaction Studies: Social Behaviour and Communication in Biological and Artificial Systems* (2008) **IF: 0.776**.

Refereed Conference and Workshop Papers (Full Papers)

134. Brahnam, Sheryl. "Creating physical personalities for agents with faces," Proceedings of the **UM2001 workshop on Attitudes, Personality and Emotions in User-Adapted Interactions**, Sonthofen, Germany (2001).
135. Brahnam, Sheryl. "Agents as artists: Automating socially intelligent embodiment," Proceedings of the **CHI02 workshop on Philosophy and Design of Socially Adept Technologies**, Minneapolis, MN, pp. 15-18 (2002).
136. Brahnam, Sheryl. "Smart faces for smart agents: Notes on modeling the social impressions of the face for face synthesis" Proceedings of the **6th International Conference on Computational Intelligence and Natural Computing - The 7th Joint Conference on Information Sciences** (JCIS 2003), Cary, NC, Duke University, pp. 1677-1680 (2003).
137. Chin, Jerry, Brahnam, Sheryl, and Chin, Mary. "Business students sharpen c# programming skills with visual studio tools for microsoft office," Proceedings of **ISECON04**, Newport, RI, paper number 4114 (2004).
138. Brahnam, Sheryl, Hignite, Michael A., Margavio, Thomas M. Barrier, Tonya B., and Chin, Jerry M. "Are Women in IS Better at Managing Conflict?" Proceedings of the **Americas Conference on Information Systems** (AMCIS04), New York, NY, pp. 1205-1212 (2004).
139. Brahnam, Sheryl. "A study in artificial personality from the perspectives of the observer and self-observer: Modeling the physical personality of faces," Proceedings of the **AAMAS04 workshop on Modeling Other Agents from Observation** (MOO-04), New York, NY, pp. 57-64 (2004).
140. Brahnam, Sheryl. "Artificial personality and the need to include the observational perspectives more centrally in the research agenda," Proceedings of the **AAMAS04 workshop on Modeling Other Agents from Observation** (MOO-04), New York, NY, pp. 109-112 (2004).
141. Brahnam, Sheryl. "Modeling the physical personality of the face for ECA self-presentation and interaction with users and the relation of physical personality to emotion," Proceedings of the **AAMAS04 workshop on Embodied Conversational Agents: Balanced Perception and Action in ECAs**, New York, NY, pp. 26-33 (2004).
142. Brahnam, Sheryl. "Towards smart embodiment for virtual agents," Proceedings of the **Third International Joint Conference on Autonomous Agents**

and Multi Agent Systems (AAMAS04), New York, NY, pp. 1268-1269 (2004).

143. Chin, Jerry, Brahnam, Sheryl, and Chin, Mary. "Flying face of outsourcing," Proceedings of **Decision Sciences Institute Southwest Regional Annual Meeting**, Dallas, TX, pp. 627-636 (2005).

144. Brahnam, Sheryl. "Notes on developing strategies for handling customer abuse of ECAs," Proceedings of the **INTERACT05 workshop on ABUSE: The Darker Side of Human-Computer Interaction**, Rome, Italy, pp. 62-67 (2005).

145. Angeli, Antonella De, Brahnam, Sheryl, and Wallis, Peter. "ABUSE: The Darker Side of Human-Computer Interaction," Proceedings of **INTERACT05**, Rome, Italy, pp. 91-92 (2005).

146. Brahnam, Sheryl Chuang, Chao-Fa, Shih, Frank Y. and Slack, Melinda R. "SVM classification of neonatal facial image of pain," Proceedings of the **6th International Workshop on Fuzzy Login and Applications** (WILF05), University of Milan, Crema, Italy (2005).

147. Angeli, Antonella De, Brahnam, Sheryl, Wallis, Peter, and Dix, Alan. "Misuse and abuse of interactive technologies," Proceedings of **CHI06**, Montréal, Québec, Canada, (2006).

148. Brahnam, Sheryl. "Gendered bods and bot abuse," Proceedings of the **CHI06 workshop on Misuse and Abuse of Interactive Technologies**, Montréal, Québec, Canada, (2006).

149. Angeli, Antonella De and Brahnam, Sheryl. "Sex stereotypes and conversational agents," Proceedings of the **AVI06 workshop on Gender and Interaction: Real and Virtual Women in a Male World,** Venice, Italy, (2006).

150. Angeli, Antonella De and Brahnam, Sheryl. "Facing emotions: Responsible experiential design." Proceedings of **INTERACT07**, Rio De Janeiro, Brazil, pp. 9-10 (2007).

151. Brahnam, Sheryl. "Failure to thrive: Value scenarios within the framework of well-being and flourishing," Proceedings of the **CHI08 workshop on Values, Value and Worth: Their Relationship to HCI?** Florence, Italy, (2008).

152. Brahnam, Sheryl and Nanni, Loris. "Neonatal facial pain detection using NNSOA and LSVM," Proceedings of the **International Conference on Image Processing, Computer Vision, and Pattern Recognition** (IPCV08), Las Vegas, vol. 2, pp. 352-357, (2008).

153. Nanni, Loris and Brahnam, Sheryl. "A Genetic algorithm for creating a set of color spaces for ear authentication," Proceedings of the **International Conference on Image Processing, Computer Vision, and Pattern Recognition** (IPCV09), Las Vegas, NV, pp. 971-975 (2009).

154. Brahnam, Sheryl and Nanni, Loris. "High performance set of features for human action classification," Proceedings of the **International Conference**

on Image Processing, Computer Vision, and Pattern Recognition (IPCV09), Las Vegas, NV, pp. 980-984 (2009).

155. Nanni, Loris, Brahnam, Sheryl, and Lumini, Alessandra. "Selecting the best performing rotation invariant patterns in local binary/ternary patterns," Proceedings of the **International Conference on Image Processing, Computer Vision, and Pattern Recognition** (IPCV10) Las Vegas, NV, pp. 369-375 (2010).

156. Brahnam, Sheryl, Nanni, Loris, Shi, Jian-Yu and Lumini, Alessandra. "Local phase quantization texture descriptor for protein classification," Proceedings of the **International Conference on Bioinformatics and Computational Biology** (Biocomp10) Las Vegas, NV, pp. 159-165 (2010).

157. Brahnam, Sheryl and Hamilton, Nathan. "Description of a cell phone concert and sound performance," Proceedings of **Designing Interactive Systems Workshop on Designing Musical Interactions for Mobile Systems, DIS 2012,** Newcastle, UK (2012).

158. Nanni, Loris, Brahnam, Sheryl, and Lumini, Alessandra. "A Combination of Methods for Building Ensemble of Classifiers," Proceedings of the **International Conference on Image Processing, Computer Vision, and Pattern Recognition** (IPCV12) Las Vegas, NV, pp. (2012).

159. Brahnam, Sheryl, Casanova, Cristiana, Nanni, Loris, and Lumini, Alessandra. "A Hybrid fingerprint multimatcher," Proceedings of the **International Conference on Image Processing, Computer Vision, and Pattern Recognition** (IPCV12) Las Vegas, NV, pp. (2012).

160. Brahnam, Sheryl, Nanni, Loris, and Lumini, Alessandra. "A secure multi-matcher system for fingerprint verification." Proceedings of the **Northeast Decision Sciences Institute 2013**, New York City, NY, pp. 511-522 (2013).

161. Nanni, Loris, Brahnam, Sheryl, Ghidoni, Stefano, and Menegatti, Emanuele. "Automated crowd detection in stadium arenas." Proceedings of the **Northeast Decision Sciences Institute,** New York City pp. 536-545 (2013).

162. Nanni, Loris, Brahnam, Sheryl, Lazzarini, Nicola and Fantozzi, Carlo. "Heterogeneous ensembles for the missing feature problem." Proceedings of the **Northeast Decision Sciences Institute,** New York City, pp. 523-535 (2013). **Best paper award**.

163. Nanni, Loris, Paci, Michelangelo, Brahnam, Sheryl, Ghidoni, Stefano, and Menegatti, Emanuele. "Local phase quantization texture descriptor for protein classification." In **Proceedings of the 14th International Conference on Bioinformatics and Computational Biology (BIOCOMP'13)**, Las Vegas, NV, pp. 56-61(2013).

164. Nanni, Loris, Lumini, Alessandra, Brahnam, Sheryl, and Migliardi, Mauro. "Ensemble of patterns of oriented edge magnitudes descriptors for face recognition." In **Proceedings of the 17th International Conference on on Image Processing, Computer Vision, and Pattern Recognition (IPCV'13)**, Las Vegas, NV, pp. 675-680 (2013).

165. Ghidoni, Stefano, Lorris Nanni, Brahnam, Sheryl, and Menegatti, Emanuele. "Texture descriptors based on dijkstra's algorithm for medical image analysis." In the proceedings of **KES Innovation in Medicine and Healthcare (InMed-14)**, San Sabastian, Spain (2014).

166. Nanni, Loris, Costa, Yandre and Brahnam, Sheryl. "Set of Texture Descriptors for Music Genre Classification." In the proceeding of the 22nd **WSCG International Conference on Computer Graphics, Visualization and Computer Vision,** Plzen, Czech Republic (2014).

167. Nanni, Loris, Paci, Michelangelo, Caetano Dos Santos, Florentino Luciano, Brahnam, Sheryl, and Hyttinen, Jeri. "Analysis of virus textures in transmission electron microscopy images." In the proceedings of **KES Innovation in Medicine and Healthcare (InMed-14)**, San Sabastian, Spain (2014).

168. Brahnam, Sheryl and Brooks, Anthony L. "Two innovative healthcare technologies at the intersection of serious games, alternative realities, and play therapy." In the proceedings of **KES Innovation in Medicine and Healthcare (InMed-14)**, San Sabastian, Spain (2014).

169. Brahnam, Sheryl and Weaver, Margaret (2015). "Re/framing virtual conversational partners: A feminist critique and tentative move towards a new design paradigm." *DUXU 2015 (LNCS 9187)* (Vol. Part II, pp. 1-12): Springer International Publishing Switzerland.

170. Nanni, Loris, Costa, Yandre Diego, Lucio, Rafael, Silla Jr., Carlos Nascimento and Brahnam, Sheryl. "Combining visual and acoustic features for bird species classification." **The annual IEEE International Conference on Tools with Artificial Intelligence (ICTAI)**, San Jose (2016).

171. Celona, Luigi, Brahnam, Sheryl, and Bianco, Simone (2019). "Getting the most of few data for neonatal pain assessment," **PervasiveHealth 2019** 13th EAI International Conference on Pervasive Computing Technologies for Healthcare, Trento, Italy. Published by ACM Digital Library.

172. Felipe, Gustavo Z., Aguiat, Rafael L., Costa, Yandre M. G., Silla Jr., Carlos N., Brahnam, Sheryl, Nanni, Loris and McMurtrey, Shannon (2019). "Identification of Infants' Cry Motivation Using Spectrograms," **2019 International Conference on Systems, Signals and Image Processing (IWSSIP)**, Osijek, Croatia, pp. 181-186.

173. Nanni, Loris, Brahnam, Sheryl, and Lumini, Alessandra (2019). "Ensemble of Deep Learning Approaches for ATC Classification." In **Smart Intelligent Computing and Applications - Proceedings of the Third International Conference on Smart Computing and Informatics** (Vol. 1), S. C. Satapathy, V. Bhateja, J. R. Mohanty and S. K. Udgata (Eds.). Singapore: Springer Nature.

174. Brahnam, Sheryl, Brattin, Rick, Crofford, Andrew, and Freres, Justin (2021) "Extraction of Key Concept Relevance Graphs from Fourteen Decades of Psychoanalytic Journal Publications." **The International Conference on**

Computational Science and Computational Intelligence (CSCI) Symposium on Big Data and Data Science, Las Vegas, USA, IEEE.

175. Sudul, M. H. C., R. L. Aguiar, Y. M. G. Costa, S. Brahnam, S. McMurtrey, L. Nanni, and C. N. Silla. "Automatic Classification of Infant's Cry Using Data Balancing and Hierarchical Classification Techniques." Paper presented at the 2023 **30th International Conference on Systems, Signals and Image Processing (IWSSIP)**, 27-29 June 2023 DOI: 10.1109/IWSSIP58668.2023.10180257.

176. Sahu, Rekha, Kuldeep Mohanty, Satya Ranjan Dash, Sheryl Brahnam, and Paola Barra. "Prediction of Heart Attack and Death: Comparison between 1 Dcnn and Conventional Ml Approaches." Conference on Circuit, Power and Intelligent Systems, 2023 (CCPIS 2023), 2023.

Reports

177. **Justin R. Freres, **Tyler McGilvry-James, **Andy Crofford, Sheryl Brahnam, Ridwan Sakidja (2021), "NASA PROJECT REPORT: Artificial Intelligence for Defect Examination," 2021 NASA-MOSGC Virtual Spring Meeting. (In Press).

Refereed Presentations (Published Abstracts)

178. Brahnam, Sheryl. "Using computer simulations in teaching scientific writing," Presentation given at the **New York Applied Linguistics Conference**, New York, NY (1996).

179. Pan, Victor Y., Brahnam, Sheryl, Rosholt, Rhys Eric, and Zheng, Ailong. "Algorithms for refinement of solutions of toeplitz-like linear systems," **RSRC'99−Joint AMS/IMS/SIAM Summer Research Conference: Structured Matrices in Operator Theory, Numerical Analysis, Control, Signal and Image Processing**, Boulder, CO (1999) (published abstract).

180. Brahnam, Sheryl. "Self-adapting face interfaces: Task-reflecting embodiment" abstract of poster presentation at the **GSFC/JPL workshop: Radical Agent Concepts** (WRAC), NASA Goddard Space Flight Center, Greenbelt, MD (2002) (published abstract).

181. Brahnam, Sheryl. "Evolving artifactual artisans from with cultural space of the face," Paper presented at the 17th Annual Conference of the **Society of Literature and Science**, Austin, TX, p. 15 (2003) (published abstract).

182. Brahnam, Sheryl and Zdenek, Sean. "Designing women the old-fashioned way: The gendered rhetoric of animated interface design," Paper presented at the 18th Annual Conference of the **Society of Literature and Science**, Durham, NC, p.9 (2004) (published abstract).

183. Brahnam, Sheryl. "The virtual text is watching you: Facing the virtual face interface," Paper presented at the 18th Annual Conference of the **Society of Literature and Science**, Durham, NC, pp. 8-9 (2004) (published abstract).

184. Howell, M. L., Hom, H. L. Jr., **Roberston, J. E., and Brahnam, S. "Hindsight bias and theory of mind tasks with children," Poster presented at the **Annual Meeting of Southwestern Psychological Association**, Austin, TX (2006).

185. Brahnam, Sheryl. "The first supper: Living and working with artifactual life forms," session abstract published in the 20th Annual Conference of the **Society for Literature, Science and the Arts**, New York City, NY (2006) (published abstract).

186. Brahnam, Sheryl. "Working with autonomous human-like artifacts and the anthropomorphic tension," Paper presented at the 20th Annual Conference of the **Society for Literature, Science and the Arts**, New York City, NY (2006).

187. Harry L Hom, Jr., **Timothy S. Freeman, Brahnam, Sheryl, **Guccione, Jessica L. and Sara C. Ayres. "Hindsight bias in emotional facial expressions," Poster presented at the **Annual Convention of the Southwestern Psychological Association** (SWPA), Ft. Worth, TX (2007).

188. Brahnam, Sheryl. "Undressing conversational agents: What the turing test reveals," Paper presented at the **Feminisms and Rhetorics Conference session: "I'm not a Feminist": The Complexities of Ethos in a Postmodern World**, Lancing MI, (2009).

189. Brahnam, Sheryl. "Ethical considerations in the customer abuse of artificial conversational agents." Proceedings of the **18th Annual International Business Ethics Conference**, New York, NY (2011).

190. Brahnam, Sheryl and Weaver, Margaret. "Re/Framing Gender Identifications in (Inter)actions with Virtual Conversational Partners," **Rhetoric Society of America (RSA) 2012 Conference**. Philadelphia, PA (2012).

Introductions and Forwards

191. Nanni, Loris, Brahnam, Sheryl, Brattin, Rick, Ghidoni, Stefano, and Jain, Lakhmi C. "An Introduction to Deep Learners and Deep Learner Descriptors for Medical Applications." In **Deep Learners and Deep Learner Descriptors for Medical Applications**, edited by Nanni, Loris, Brahnam, Sheryl, Rick Brattin, Ghidoni, Stefano and Lakhmi C. Jain. Berlin: Springer, Cham, (2020).

192. Brahnam, Sheryl and Jain, Lakhmi C. "Intelligent decision support systems in healthcare." In *Advanced computational Intelligence Paradigms in Healthcare 5: Intelligent Decision Support Systems*, Springer-Verlag, Berlin (2010).

193. Brahnam, Sheryl and Jain, and Lakhmi C. "Virtual reality in psychotherapy, rehabilitation, and assessment." In *Advanced computational Intelligence Paradigms in Healthcare 6: Virtual Reality in Psychotherapy, Rehabilitation, and Assessment*, Springer-Verlag, Berlin, (2011).

194. Brahnam, Sheryl, Jain, Lakhmi C., Lumini, Alessandra, and Nanni, Loris. "Introduction to Local Binary Patterns−New variants and new applications." In *Local Binary Patterns: New Variants and New Applications,* Springer-Verlag, Berlin, (2014).

195. Brooks, Anthony, Brahnam, Sheryl, and Jain, Lakhmi. "Technologies of Inclusive Well-Being at the Intersection of Serious Games, Alternative Realities, and Play Therapy**." In Technologies of Inclusive Well-Being: Serious Games, Alternative Realities, and Play Therapy**, Springer-Verlag, Berlin (2014).

196. Brahnam, Sheryl, Brooks, Anthony Kapralos, Bill, and Jain, Lakhmi. "An overview of recent advances in technologies of inclusive well-being**." In Recent Advances in Technologies of Inclusive Well-being**, Springer-Verlag, Berlin (2017).

Keynote Addresses

197. Brahnam, Sheryl. "Building conversational agents: Ethos, credibility, believability." Keynote speaker for **The Ethics of Presence and Social Presence Technologies**, Padua, Italy (2008).

198. Brahnam, Sheryl. "Robust ensemble learning for data mining." A keynote speaker for **IEEE SOFA**, Timisoara Romania (2014).

199. Brahnam, Sheryl. "Building General Purpose Classification Systems." A keynote speaker for the **Third International Conference on Smart Computing and Informatics**, Bhbaneswar City, India (2018).

200. Brahnam, Sheryl. "Building GenP Ensemble Systems with Heterogeneous Ensembles and Deep Learners (Medical Applications)" **Smart Digital Futures 2019**, St. Julians, Malta (2019).

Other Presentations

- 2019 invitation to present 2019 a talk titled "Understanding Parameters in Mediated Psychoanalysis Using Communication Models" to the St. Louis Psychoanalytic Society.

Other

1. Dissertation: Brahnam, Sheryl, (2002). *Modeling physical personalities for virtual agents by modeling trait impressions of the face: A neural network analysis*. Ph.D. Thesis.

2. Pilot Infant COPE (Classification of Pain Expressions) database and study design: A database of still photographs of neonatal faces and evaluation protocols for evaluating machine classification of neonatal pain expressions. This database contains 204 facial photographs of 26 infants experiencing a variety of

stimuli, including a pain stimulus, and is available to researchers interested in pain expression classification.

3. Image Control Point Utility: a program for adding control points to faces that is available to researchers in face recognition
4. Abstract of Journal item #7 published in *Acute Pain* (8) 3 p. 146 (2006).
5. 5. Infant COPE2 database and study design: A database of still and video images of neonatal faces and evaluation protocols for evaluating machine classification of neonatal pain expressions.

Grants

1. MSU Faculty Grant: Feasibility Study for Developing a Machine Classification System of Neonatal Facial Expressions of Pain (2003).
2. MSU Faculty grant: Customer Verbal Abuse of Online Embodied Conversational Agents (2006).
3. MSU Faculty summer research grants (2): 2003 and 2004.
4. "Missouri State University Provost's Futures Grant (with Vonda Yarberry and Ruth Barnes) (2007).
5. MSU Summer Fellowship Research Grant (2011).

Professional Experience

Professor at Missouri State University

Assistant Professor from Fall 2002 to Summer 2007.
Associate Professor from Fall 2007 to Summer 2012.
Professor from Fall 2012 to present.

CIS Department

Fall 2002 to present
Undergraduate Courses
  CIS 201 Computer Applications for Business (1 semester)
  CIS 202 and 260 Program Design and Development (5 semesters, 2 summers)
  CIS 375 Advanced Web Programming (2 semesters)
  CIS 421 Information Systems in Business (2 semester)
Graduate Courses
  CIS/ITC 661/761 Management Information Systems (taught several sections every semester and many summers, traditional, online, iTV, zoom, and for specialized cohorts, see below)
Course Development
*   China EMBA program: developed CIS 761 to sponsored professional Chinese cohorts.
*   Master of Science in Information Technology (MSIT): developed ITC 761

for a more technical cohort.

- Developed course materials for UDABOL (Bolivia) online MBA program (where new materials, exams, lectures, and guidelines were developed in 2020-2021 for use by other professors teaching the course).
- Developed Studentwebstuff.com 1998-2005 (Missouri State University)

Instructor at Yeshiva University
MIS Department
Fall 2001 to Spring 2002
Undergraduate Courses
    ENT 2250 Internet for Business (1 semester)
    ENT 2251 Advanced Internet for Business (1 semester)
    ENT 2125 C++ (1 semester)
    ENT 3831 Visual Basic (1 semester)

Instructor and Adjunct at Baruch College
CIS/STAT Department
Fall 1996 to Fall 2001
Undergraduate Courses
    CIS 3100 Introduction to C++ (6 semesters)
    CIS 4100 Advanced C++ (8 semesters)
    CIS 4500 Advanced Networking (2 semesters)
    CIS 2200 Introduction to Computer Information Systems (3 semesters)
    CIS 3630 Multimedia (6 semesters)
    CIS 3500 Introduction to Networking (2 semesters)
    CIS 5800 Advanced Projects (2 semesters)
Graduate Courses
    CIS 9310 Introduction to C++ (2 semesters)
    CIS 9350 Introduction to Networking (1 semester)
    CIS 9360 Multimedia (2 semesters)
    CIS 9000 Management Information Systems (1 semester)
Course Development
    Developing interdisciplinary CIS courses
    Developed numerous courses for the immersion summer sessions 1994-2000 (CCNY)

Special Courses Taught
- 2016 taught a continuing education course titled "History, Issues, and Opportunities of Distance Psychotherapy" (with Joe Behrman and Edmund Sprunger) at the St. Louis Psychoanalytic Institute (3.0 Credit Hours).

- 2021 taught a continuing education course titled "Boundary Issues, Enactments, and Changes in the Frame in Distance Analysis and Psychodynamic Therapy" (with Tina Marie Dale, MSW) at the St. Louis Psychoanalytic Institute.

Service

A. Professional Service

1. **Editorial Board** for **Sensors,** Section Board Member of Sensors ([Section: Biomedical Sensors](#)) 2020 to present**.**
2. **Editorial Board** for **Applied Computing and Informatics (ACI)** 2021 to present.
3. **Associate editor** for **Intelligent Decision Technologies (IDT) Journal** 2014 to 2019.
4. **Co-Editor in Chief** (with Jain C. Lakhmi and Richi Nayak) of *International Journal of Knowledge and Web Intelligence* (IJKWI) 2009-2010.
5. **Co-Editor** (with Angeli, Antonella De) Special issue entitled *Abuse and Misuse of Social Agents*, **Interacting with computers** (2008).
6. **Co-Editor** (with Angeli, Antonella De, Chritoph Bartneck, and Catherine Pelachaud) Special issue entitled *Misuse and Abuse of Interactive Technologies*, **Interaction Studies: Social Behaviour and Communication in Biological and Artificial Systems** (2008).
7. **Organizer** for special session **Well-Being, Rehabilitation, and Healthcare: Serious Games, Alternative Realities, and Play Therapy**, HCII 2014.
8. **Co-Chair** and member organizing committee for **Interact07 workshop**: *Facing Emotions: Responsible Experiential Design*.
9. **Co-Chair and member organizing committee** for **CHI06 workshop**: *Misuse and Abuse of Interactive Technologies*.
10. **Co-chair and member organizing committee** for **Interact05** workshop: *Abuse: The Darker Side of Human Computer Interaction*.
11. **Dissertation committee member** Chao-Fa Chuang, NJIT (2007).
12. **Session chair** *The Rhetoric of Virtual Embodiment, Intelligent Assistants, and Virtual Humans*, **SLS**, Durham, NC, 2004.
13. **Session chair and organizer** *S032: Well-Being, Rehabilitation, and Healthcare: Serious Games, Alternative Realities, and Play Therapy*, HCII, Crete, Greece, 2014.
14. **Session chair and organizer** *The First Supper: Living and Working with Artifactual Life Forms*, **SLSA**, NY, NY, 2006.
15. **Member AI advisory board** LifeBoat Foundation: Safeguarding Humanity.
16. **Member editorial board** *International Journal of Knowledge Engineering and Soft Data Paradigms* (IJKESDP) 2008 to present.
17. **Member editorial board** *Journal of Knowledge and Learning Objects* (LKJLO) 2005 to present.

18. **Member editorial board** *International Journal of Service and Computing Oriented Manufacturing* (IJSCOM) 2010 to present.
19. **Member editorial board** *Informing Science: the International Journal of an Emerging Transdiscipline* 2005 to Nov. 2006.
20. **Member editorial board** for *Journal of Information Technology Education* 2005 to present
21. **Member of the international program Committee** First International Conference on Smart Medical and Healthcare Systems, University of Piraeus, Greece 2013.
22. **Member program Committee** *6th International Symposium Advances in Artificial Intelligence and Applications* (AAIA'11).
23. **Member program committee** CDCH Workshop on Creative design in interdisciplinary projects in cultural heritage 2012.
24. **Member program committee** *ICDIP International Conference on Digital Information Processing and Communications* 2010, 2011.
25. **Member program committee** *ICSECS 2nd International Conference on Software Engineering and Computer Systems* 2010.
26. **Member program committee** *DICTAP International Conference on Digital Information and Communication Technology and apps* 2010.
27. **Member program committee** AVI 2006 *Gender and Interaction: Real and Virtual Women in a Male World*, Venice, Italy, 2005.
28. **Technique committee member** Workshop on GameAblitation and Virtual Reality Healthcare, Co-located with Culture and Computing 2012.
29. **PhD examiner: US and international.**
30. **Outside reviewer:** Several faculty promotions.
31. **Outside reviewer** PSC-CUNY faculty grant awards 2003.
32. **Outside EU expert examiner** for Technology Foundation STW
33. **Outside reviewer ESRC Grant:** Proposal for a European Economic and Social Research Council Grant
Review for many conferences and journals including (not exclusively):
34. **Reviewer** ESWA to 2015 to present.
35. **Reviewer** PLOS ONE 2013 to present.
36. **Reviewer** ICAART 2013 to present
37. **Reviewer** HCI International 2013 to present.
38. **Reviewer** *Artificial Intelligence in Medicine* 2011 to present.
39. **Reviewer** *Neural Processing Letters* 2014 to present..
40. **Reviewer** *IEEE Transactions on Multimedia* 2011 to present.
41. **Reviewer** *Pattern Recognition* 2011 to present.
42. **Reviewer** IUI 2010 to present.
43. **Reviewer** *Virtual Reality* 2009 to present.
44. **Reviewer** Presence 2009 to present.
45. **Reviewer** CHI 2008 to present.

46. **Reviewer** *Informing Science: The International Journal of an Emerging Transdiscipline* 2005 to present.
47. **Reviewer** Journal of the Association for Information Systems 2011.
48. **Reviewer** Asian Journal of Control 2011.
49. **Reviewer** *AAIA* 2011.
50. **Reviewer** CHI 2007 (Reviewed workshop proposals).
51. **Reviewer** CHI 2006 workshop *Abuse and misuse of interactive technologies.*
52. **Reviewer** *Gender and Interaction: Real and Virtual Women in a Male World* (AVI) 2006
53. **Reviewer** *Inform* 2005 to present.
54. **Reviewer** *INTERACT 2005 workshop The darker side of human-computer interaction.*
55. **Reviewer** *Decision Support Systems* (DSS) 2005.
56. **Reviewer** *AMCIS* 2004.
57. **Reviewer** *Informing Science Conference 2003.*
58. **Web designer and master** Agent Abuse research group: www.agentabuse.org.
59. **Web designer and master** HCI "responsible experiential computing," www.facingemotions. org.
60. **Participant** CUNY Innovative and Exemplary Program 1989.
61. **Participant** Fipse grant research in curriculum development 1990-1995.
62. **Workshop Leader** teacher development workshops at the City College of New York and City University of New York 1992-1996.

B. Academic Service

University
Served on many committees including the following:
1. **Member and subcommittee chair** of CGEIP 2003-2008 (MSU).
2. **Member** of ad hoc committee to develop Interdisciplinary Interactive Arts Studios as part of the provost incentive program 2005 - 2006 (MSU).
3. **Member** of the Graduate Faculty 2005 to present (MSU).
4. **Member** of the library committee 2012 (MSU).

College
Served on many committees including the following:
- **Member** of the Graduate MBA Assessment taskforce.
  Also served as the MIS **CIS 661 subchair** 2004 to 2009 (MSU).
- **Member** of the COB Faculty Selection and Awards Committee 2012 to present.
- **Committee chair** of the COB Faculty Selection and Awards Committee 2013.

Departmental (CIS MSU)
Served on many committees including the following:
- **Advised** many independent studies projects
- **Chair** Tenure and Progression committee 2019 to present.

- **Co-Chair** CIS minor in web programming: 2004 to present.
- **Chair** curriculum subcommittee to develop programming courses for the humanities, 2006 to present.
- **Coordinator** for CIS 661,ITC 2004 to present.
- **Member** of Computer Resource Committee, Spring 2002 to present.
- **Co-Administrator** MSDN Resources, Spring 2002 to Fall 2005.
- **Member** curriculum development committee for CIS 202, Fall 2002.
- **Member** faculty recruiting committee, Fall 2002.
- **Participant** Major's Fair 2002 to present
- **Participant** Career Day 2002 to present.
- **Teaching overload** Fall 2005 to Spring 2007 and 2020.

Student

Faculty advisor for the MSU Veggie Club Fall 2004 to Spring 2010.

Other

- **St. Louis Psychoanalytic Institute**: served on the curriculum committee 2017-2022.
- **Kauffman Scholar Program**: Offered lectures on Biometrics for incoming students, Summer 2007.
- **Ozark Science and Engineering Fair**: Organized CIS 671 volunteers for community service 2006-2007.

C. Community Service

1. **President** of The Ozark Live Food Association 2002-2008.
2. **Webmaster** for the Beekeepers Association of the Ozarks 2004-2006.

Awards

1. **Daisy Portenier Loukes Research Professorship** 2015-2018
2. **Daisy Portenier Loukes Research Fellow** 2013-2015
3. **COB Outstanding Scholarly Activity Award For Empirically Based Research Paper** 2017-18
4. HCII 2015 **Best Paper Award** for HCI Thematic Area (with Roberts, Jenifer, Nanni, Loris, Starr, Cathy L., and Bailey, Sandra L.) for the paper "Design of a bullying detection/alert system for school-wide intervention."
5. **Dean's Research Scholar Award** 2015-16
6. **Dean's Research Scholar Award** 2014-15
7. **Dean's Research Scholar Award** 2013-14
8. NEDSI 2013 **Best Contribution to Theory Award** (with Nanni, Loris, Nicola Lazzarini, and Carlo Fantozzi) for the paper 'Heterogeneous ensembles for the missing feature problem.
9. Missouri State University **Foundation Award for Research** (2013)

10. Summer Faculty Fellowship 2011.
11. MSU Faculty **College Recognition Award for Excellence in Teaching**, COBA, Missouri State University, 2005.
12. MSU Faculty **College Recognition Award for Excellence in Research**, COBA, Missouri State University, 2006.
13. CCNY **Science Fellowship**, The Graduate Center of the City University of New York (1997-1999).

Press

Selected Articles Featuring Research in Major Media

1. "Even a chatbot can turn nasty," by Duncan Graham-Rowe *New Scientist* Print Edition, number 2521, p. 26 (2005).
2. "Crean un 'software' que detecta el grado de sufrimiento de los bebés," by Ángel Díaz in *El Mundo*, Madrid newspaper, the Ciencia Section, p. 34 October 24, (2006).
3. "Assessing pain in infants: New software could help medical staff know when newborn patients are in pain," by Duncan Graham-Rowe *Technology Review: An MIT enterprise* October, 18 (2006), http://www.technologyreview.com/read_article.aspx?id=17630andch= biotech.
4. "Ja, was hat der Kleine denn?" by Katharina Kluin, *Zeitwissen* (Gesundheit), Print Edition, p. 60, January (2007).
5. "Computing: Nobody enjoys telephoning a call center. Could 'Chatbot' technology make the experience less painful?" **The Economist,** Technology Quarterly (print edition), Call and Response, p. 4-5, Mar 10 (2007).
6. Oct. 21, 2016. Quoted in Michael Schrage article for **Harvard Business Review** "Why you shouldn't swear at Siri." https://hbr.org/2016/10/why-you-shouldnt-swear-at-siri
7. April 29, 2020. Interviewed by Kate Murphy for her **NYTimes** article "Why Zoom Is Terrible." https://www.nytimes.com/2020/04/29/sunday-review/zoom-video-conference.html

Selected Podcasts

8. June 24, 2015. Interviewed by Mike Elgan for **Fast Company Podcast** "The case against teaching kids to be polite to Alexa" Mind and Machine. https://www.fastcompany.com/40588020/the-case-against-teaching-kids-to-be-polite-to-alexa
9. April 2020. Interviewed by Daniel Faggella for **Techemergence** and **EMERO** "Calling Siri Names? You're Not Alone - A Closer Look at Misuse of AI Agents." https://emerj.com/ai-podcast-interviews/calling-siri-names-youre-not-alone-a-closer-look-at-misuse-of-ai-agents/

10. 2020. Interviewed by **Oscar Trimboli** podcast 088: "How to listen in a video meeting." https://www.oscartrimboli.com/podcast/088/

Selected Interviews on Television and Radio

11. **2006**. Interviewed by **W Radio** (Diario El Pais, Canal Plus, CNN Spain, and XEW) for the talk show, *La hora del regreso*, regarding the Infant COPE project October 22, 2006.
12. **2008**. Interviewed for **CBS Evening News**, Sanjay Gupta's special series on *Easing the pain: Helping infants suffering from pain*. Feb 21. 2008.

Associations (Past and Present)

- AAAI (Association for the Advancement of Artificial Intelligence)
- ACM (Association for Computing Machinery)
- AIS (Association for Information Systems)
- AITP (Association of Information Technology Professionals)
- APA (American Psychological Association and sections 39)
- APsaA (The American Psychoanalytic Association)
- Cognitive Science Society
- IEEE
- Informing Science Institute
- KES International (Knowledge-based and intelligent Engineering Systems)
- User Modeling
- LifeBoat Foundation (Advisory Board: Diplomacy, Life Extension, and Robotics/AI)
- Rhizome
- RSA (Rhetorical Society of America)
- SCIP (Soft Computing in Image Processing) Working Group
- SLSA (Society for Literature Science and the Arts)
- SWPA (Sourthwestern Psychological Association)
- YLEM (Artists Using Science and Technology)

Society Memberships

Full membership in Sigma Xi, The Scientific Research Honor Society

Websites

Research Websites

www.mypsyspace.com
www.agentabuse.com
www.copedata.com

www.facingemotions.org
www.faceinterfaces.com