## **Journal Publications**

- One article currently under review (C. D. Hollander and A. S. Wu, "Distributed Consensus Formation through Unconstrained Gossip," submitted to IEEE Transactions on Information Theory).
- Batarseh, F. and A.J. Gonzalez, "Incremental Lifecycle Validation of Knowledge-Based Systems through CommonKADS". IEEE Transactions on Systems, Man and Cybernetics: Systems. Vol. 43, No. 3, May 2013, pp. 643-655.
- Batarseh, F. and A.J. Gonzalez, "Validation of Knowledge-Based Systems- A Reassessment of the Field". Artificial Intelligence Review. Published online Feb 2013, DOI: 10.1007/s10462-013-9396-9
- P. Varcholik\*, J. J. LaViola & C. E. Hughes, "Establishing a Baseline for Text entry for a Multi-Touch Virtual Keyboard," International Journal of Human-Computer Studies, 70(10), October 2012, 657-672, http://dx.doi.org/10.1016/j.ijhcs.2012.05.007
- Corey McCall, Branden Maynes, Cliff C. Zou, Ning J. Zhang, "An automatic medication self-management and monitoring system for independently living patients", Elsevier Journal of Medical Engineering & Physics, Vol. 35, No. 4, 2013, pp. 505-514. http://dx.doi.org/10.1016/j.medengphy.2012.06.018
- Soyoung Park, Baber Aslam, Damla Turgut, Cliff C. Zou, "Defense against Sybil Attack in the Initial Deployment Stage of Vehicular Ad hoc Network based on Roadside Unit Support", Wiley Journal of Security and Communication Networks, Vol. 6, No. 4, 2013, pp. 523-538. http://dx.doi.org/10.1002/sec.679
- Brust M.R., M.I. Akbas(\*), and D. Turgut, "Multi-hop Localization System for Environmental Monitoring in Wireless Sensor and Actor Networks," Wiley Journal of Concurrency and Computation: Practice and Experience, Vol. 25, No. 5, April 2013, pp. 701–717. http://dx.doi.org/10.1002/cpe.1812
- Park S., B. Aslam, D. Turgut, and C. Zou, "Defense against Sybil Attack in the Initial Deployment Stage of Vehicular Ad hoc Network based on Roadside Unit Support," Special Issue on Wiley's Security and Communication Networks, Vol. 6, No. 4, April 2013, pp. 523-538. http://dx.doi.org/10.1002/sec.679
- Haddad\*, G. and G.T. Leavens, "Specifying Subtypes in Safety Critical Java Programs," Concurrency and Computation: Practice and Experience, online publication (early), Oct. 2012. http://dx.doi.org/10.1002/cpe.2930

- Rebêlo, H., R. Lima, G.T. Leavens, M. Cornelio, A. Mota, and C. Oliveria, "Optimizing Generated Aspect-Oriented Assertion Checking Code for JML Using Program Transformations: An Empirical Study," Science of Computer Programming, online publication (early), Oct. 2012, http://dx.doi.org/10.1016/j.scico.2012.09.003
- Hatcliff, J., G.T. Leavens, K.R.M. Leino, P. Müller, and M. Parkinson, "Behavioral Interface Specification Languages," ACM Computing Surveys, Vol. 44, num. 3, pp. 16:1-16:58, June, 2012. http://doi.acm.org/10.1145/2187671.2187678
- Folsom-Kovarik\*, J., G. Sukthankar, and S. Schatz. "Tractable POMDP representations for intelligent tutoring systems," ACM Transactions in Intelligent Systems Technology, Vol 4. No. 2, March 2013, pp. 29:1–29:22.
- Osipov-Lvoff\*, K. and G. Sukthankar. "AmalgaCloud: Social network adaptation for human and computational agent team formation," ASE Human Journal, Vol. 2. 2012, pp. 61–73. 3.
- Davami, E. and G. Sukthankar. "Online learning of user-specific destination prediction models," ASE Human Journal, Vol. 3, 2012, pp. 144–151.
- Ding J#, Li X, Hu H., "Systematic discovery of cis-regulatory elements in Chlamydomonas reinhardtii genome using comparative genomics," Plant Physiology, August 2012, pp.112.200840, doi: http://dx.doi.org/10.1104/pp.112.200840, 2012. (#: student coauthor)
- Wang Y#, Ding J#, Daniell H, Hu H, Li X. Motif analysis unveils the possible co-regulation of chloroplast genes and nuclear genes encoding chloroplast proteins. Plant Mol Biol, Vol. 80, No. 2, September 2012, pp 177-187. doi:10.1007/s11103-012-9938-6, 2012. (#: student coauthor)
- Nazim Ashraf, Yuping Shen, Xiaochun Cao, Hassan Foroosh, View-Invariant Action recognition Using Weighted Fundamental Ratios, Computer Vision and Image Understanding (CVIU), vol. 117, pp. 587-602, 2013
- Chuan Sun, Imran Junejo, Hassan Foroosh, Motion Sequence Volume based Retrieval for 3D Captured Data, Computer Graphics Forum, John Wiley, 2012.
- Gupta, P., Lobo, N., and J. LaViola, "Markerless Tracking and Gesture Recognition using Polar Correlation of Camera Optical Flow," Machine Vision and Applications, Vol. 24. No. 3, 2013, pp. 651-666.
- Ellis, C., \*Masood, Z., Tappen, M., LaViola, J., and R. Sukthankar, "Exploring the Trade-off Between Accuracy and Observational Latency in Action Recognition," International Journal of Computer Vision, Vol. 101 No. 3, 2013, pp. 420-436.
- Cheema, S. and J. LaViola, "3D Gesture Classification With Linear Acceleration and Angular Velocity Sensing Devices for Video Games," Entertainment Computing, Vol. 4 No. 1, 2013, pp. 11-24. UCF/CECS/FAR (revised 04/12) 4
- Tomlinson, B., Patterson, D., Pan, Y., Blevis, B., Nardi, B. Silberman, S., \*Norton, J., and J. LaViola, "What If Sustainability Doesn't Work Out?," Interactions, Vol. 19 No. 6, 2012, pp. 50-55.
- Varcholik, P., LaViola, J., and C. Hughes, "Establishing a Baseline for Text Entry for a Multi Touch Virtual Keyboard," International Journal of Human-Computer Studies, Vol. 70 No. 10, 2012, pp. 657-672.

- Lehman\* J. and K. O. Stanley, "Evolvability Is Inevitable: Increasing Evolvability Without the Pressure to Adapt," PLoS ONE, Vol. 8 No. 4, April 2013, e62186 (9 pages). http://dx.doi.org/10.1371/journal.pone.0062186
   Note: PLoS is an online open access journal (though peer reviewed and high impact), so it does not use page numbers. Instead, the article identifier e62186 identifies the article.
- Risi\* S. and K. O. Stanley, "An Enhanced Hypercube-Based Encoding for Evolving the Placement, Density and Connectivity of Neurons," Artificial Life journal, Vo. 18 No 4, October 2012, pp. 331-363. http://10.1162/ARTL\_a\_00071
- Soltoggio A. and K. O. Stanley, "From Modulated Hebbian Plasticity to Simple Behavior Learning through Noise and Weight Saturation," Neural Networks journal, Vol. 34, October 2012, pp. 28-41. http://dx.doi.org/10.1016/j.neunet.2012.06.005
- Steven Nichols (Undergraduate), Yu Zhang (Graduate), and Kien A. Hua, "Robust Wireless Sharing of Internet Video Streams," Multimedia Systems, Vol. 19, No. 1, a special issue of selected papers from the 2011 International Conference on Internet Multimedia Computing and Service, 2013, pp. 65-76. http://link.springer.com/article/10.1007%2Fs00530-012-0295-8
- Khan S.A., V. Thakore, A. Behal, L. Bölöni, and J. J. Hickman. Comparative analysis of system identification techniques for nonlinear modeling of the neuron-microelectrode junction. Journal of Computational and Theoretical Nanoscience, 10(3):573–580, March 2013. http://dx.doi.org/10.1166/jctn.2013.2736
- Wang W, Bhattacharjee S, Chatterjee M, and Kwiat K, "Collaborative Jamming and Collaborative Defense in Cognitive Radio Networks", Journal on Pervasive and Mobile Computing. Available online 29 June 2012, http://dx.doi.org/10.1016/j.pmcj.2012.06.008
- Jian Sun\* and Marshall F. Tappen, Separable Markov Random Field Model and Its Applications in Low Level Vision, IEEE Transactions on Image Processing Vol. 22, No. 1, 2013, pp.402-407
- C. Ellis\*, S. Masood,\* M. F. Tappen, J. J. LaViola, and R. Sukthankar, "Exploring the Trade-off Between Accuracy and Observational Latency in Action Recognition", International Journal of Computer Vision Vol. 101, Feb. 2013, Issue 3, pp. 420-436
- Tariq S., and M. Bassiouni, "Hop-Count Fairness-Aware Protocols for Improved Bandwidth Utilization in WDM Burst-Switched Networks" Journal of Photonic Network Communications, Springer Publishing, Vol. 25, No. 1, January 2013, pp. 35-46.
- Zhou B., and M. Bassiouni, "Threshold-based preemption scheme for improving throughput in OBS networks"
   Journal of Photonic Network Communications, Springer Publishing, Volume 24, No. 1, June 2012, pp. 12-21.
- Saleemi, I., and M. Shah, "Multiframe Many-Many Point Correspondence for Vehicle Tracking in High Density Wide Area Aerial Videos", International Journal of Computer Vision, April 24, 2013. http://dx.doi.org/10.1007/s11263-013-0624-1
- Dey, S., A. R. Rao, and M. Shah, "Exploiting the Brains Network Structure in Identifying ADHD Subjects", Frontiers in system Neuroscience, November 16, 2012. http://dx.doi.org/10.3389/fnsys.2012.00075 3.
- Yang, Y., I. Saleemi, and M. Shah, "Discovering Motion Primitives for Unsupervised Grouping and One-Shot Learning of Human Actions, Gestures, and Expressions", IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI), Vol. PP, No. 99, 2012, pp. 1-14. http://dx.doi.org/10.1109/TPAMI.2012.253
- Jiang, Y., S. Bhattacharya, S. Chang, and M. Shah, "High-level event recognition in unconstrained videos", International Journal for Multimedia Information Retrieval, November 13, 2012. http://dx.doi.org/10.1007/s13735-012-0024-2
- Reddy, K., and M. Shah, "Recognizing 50 Human Action Categories of Web Videos", Machine Vision and Applications (MVA), November 16, 2012. http://dx.doi.org/10.1007/s00138-012-0450-4

- Solmaz, B., S. Modiri Assari, and M. Shah, "Classifying Web Videos using a Global Video Descriptor", Machine Vision and Applications (MVA), September 26, 2012. http://dx.doi.org/10.1007/s00138-012-0449-x
- Reilly, V., B. Solmaz, and M. Shah, "Shadow Casting Out Of Plane (SCOOP) Candidates for Human and Vehicle Detection in Aerial Imagery", International Journal of Computer Vision, October, 12, 2012. http://dx.doi.org/10.1007/s11263-012-0580-1
- Izadinia, H., I. Saleemi, and M. Shah, "Multimodal Analysis for Identification and Segmentation of Moving-Sounding Objects", IEEE Transactions on Multimedia, Vol. 15, No. 2, February 2013, pp. 378-390. http://dx.doi.org/10.1109/TMM.2012.2228476
- Oreifej, O., X. Li, and M. Shah, "Simultaneous Video Stabilization and Moving Object Detection in Turbulence", IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. 35, No. 2, February 2013, pp. 450-462. http://dx.doi.org/10.1109/TPAMI.2012.97
- Solmaz, B., B. E. Moore, and M. Shah, "Identifying Behaviors in Crowd Scenes Using Stability Analysis for Dynamical Systems", IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. 34, Issue 10, October 2012, pp. 2064-2070. http://dx.doi.org/10.1109/TPAMI.2012.123
- Vasudevan, M. and Deo, N., "Efficient Community Identification in Complex Networks," Social Network Analysis and Mining (SNAM) Springer, 2012, Vol 2, No. 4, pp. 345–359.
- A. D. Bookatz, S. P. Jordan, Y.-K. Liu, and P. Wocjan, "Quantum Nonexpander Problem is Quantum-Merlin-Arthur-complete," Physical Review A, Vol. 87, 2013.
- P. Sarvepalli and P. Wocjan, "Quantum Algorithms for One-Dimensional Infrastructures," Quantum Information and Computation, Vol. 13, No. 11, 2013.
- Ping Ge\* and Shaojie Zhang, "Incorporating phylogenetic-based covarying mutations into RNAalifold for RNA consensus structure prediction", BMC Bioinformatics, 14:142, 2013. http://dx.doi.org/10.1186/1471-2105-14-142.
- Peter Tonner\*, Vinodh Srinivasasainagendra, Shaojie Zhang and Degui Zhi, "Detecting transcription of ribosomal protein pseudogenes in diverse human tissues from RNA-seq data", BMC Genomics, Volume 13:41, 2012. http://dx.doi.org/10.1186/1471-2164-13-412
- Yuan Li\*, Cuncong Zhong\* and Shaojie Zhang, "Finding consensus stable local optimal structures for aligned RNA sequences and its applications to discovering riboswitch elements", BMC Genomics (Accepted).
- Cuncong Zhong\*, Justen Andrews and Shaojie Zhang, "Discovering non-coding RNA elements in Drosophila 3' untranslated regions", BMC Genomics (Accepted).
- Arup Kumar Ghosh\*, Susmit Jha, Christopher Langmead, and Sumit Kumar Jha; Discovering rare behaviors in stochastic differential equations using decision procedures: applications to a minimal cell cycle model. BMC Genomics. 2013 (accepted; in press) Journal Impact Factor: 4.07
- Sumit Kumar Jha, Raj Gautam Dutta\*, Christopher James Langmead, Susmit Jha and Emily Sassano\*: Synthesis of Insulin Pump Controllers from Safety Specifications using Bayesian Model Validation. International Journal of Bioinformatics Research and Applications, Vol.8, No.3/4, pp. 263 285, 2012

## **Conference Publications w/Proceedings**

• Cortney Riggs and Annie S. Wu, "Variation as an element in multi-agent control for target tracking," In the Proceedings of the 25th IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), Vilamoura, Portugal, October 7-12, 2012, pp. 834-841.

- Annie S. Wu, R. Paul Wiegand, and Ramya Pradhan, "Using response probability to build system redundancy in multi-agent systems," In the Proceedings of the 12th International Conference on Autonomous Agents and Multiagent Systems (AAMAS), Saint Paul, Minnesota, May 6-10, 2013.
- Vera A. Kazakova and Annie S. Wu and Talat S. Rahman. Cluster Energy Optimizing Genetic Algorithm. 2013.
   Accepted for publication in the Proceedings of the 15th Annual Conference Companion on Genetic and Evolutionary Computation (GECCO 2013). July 6-10, 2013 Amsterdam, Netherlands. One paper currently under review (C. D. Hollander and A. S. Wu, "The Impact of Network Topology and Node Centrality on the Consensus Time of Unconstrained Gossip," Submitted to the 52nd IEEE Conference on Decision and Control (CDC 2013), Florence, Italy, Dec. 2013).
- A Progress Reporting System to Advance Experiential Learning and Administrate Student Activities With Shane Chism (undergrad student) International Conf on e-Learning, e-Business, Enterprise Information Systems, and e-Government (EEE) 2012 Las Vegas, July 2012 Refereed; International
- A Submission and Adjudication System to Track Tracking Training and Enhance Performance With Glenn Martin (grad student) and Chris Gouge International Conf on Internet Computing (ICOMP) 2012 Las Vegas, July 2012 Refereed; International
- Software Development Educational Pathway: AS => BAS With Colin Archibald, Richard Grant, and Craig Tidwell International Conf on Frontiers in Education: Computer Science and Computer Engineering (FECS) 2013 Las Vegas, July 2013 Refereed; International
- Brawner, K., R. Sottilare, and A.J. Gonzalez. "Semi-Supervised Classification of Realtime Physiological Sensor Datastreams for Student Mood Assessment in Intelligent Tutoring" Proceedings of the Intelligent Tutoring Systems Conference, 2012,
- S. Braeger\*, Y. Xiong\* & C. E. Hughes, "Photometric Display Calibration for Embedded MR Environments," IEEE Virtual Reality (IEEE VR 2013), Orlando, FL, March 18-20, 2013, Poster 41.
- A. Nagendran, R. Pillat\*, C. E. Hughes & G. Welch, "Continuum of Virtual-Human Space: Towards Improved Interaction Strategies for Physical-Virtual Avatars," ACM SIGGRAPH VRCAI 2012, Dec. 2-4, 2012, Singapore, 135-142. http://doi.acm.org/10.1145/2407516.2407554
- Erich Dondyk, Cliff C. Zou, "Denial of Convenience Attack to Smartphones Using a Fake Wi-Fi Access Point," in 10th Annual IEEE Consumer Communications and Networking Conference (CCNC), Las Vegas, Jan. 11-14, 2013, pp. 164-170. http://dx.doi.org/10.1109/CCNC.2013.6488441
- Faisal Amjad, \*Baber Aslam, Cliff C. Zou, "Transparent Cross-Layer Solutions for Throughput Boost in Cognitive Radio Networks," in 10th Annual IEEE Consumer Communications and Networking Conference (CCNC), Las Vegas, Jan. 11-14, 2013, pp. 580-586. http://dx.doi.org/10.1109/CCNC.2013.6488502
- Rung-Ching Chen, Wei-Lung Chang, Chia-Fen Shieh, Cliff C. Zou, "Using Hybrid Artificial Bee Colony Algorithm to Extend Wireless Sensor Network Lifetime," Third International Conference on Innovations in Bio-Inspired Computing and Applications (IBICA), Sept. 26-28, 2012. pp. 156-161. http://dx.doi.org/10.1109/IBICA.2012.27
- Steven Zittrower, Cliff C. Zou, "Encrypted Phrase Searching in the Cloud," IEEE Global Communications Conference (GLOBECOM), Dec. 3-7, 2012. pp. 764-770. http://dx.doi.org/10.1109/GLOCOM.2012.6503205
- Baber Aslam, \*Faisal M. Amjad, Cliff C. Zou, "Optimal Roadside Units Placement in Urban Areas for Vehicular Networks," in 17th IEEE Symposium on Computers and Communications (ISCC), Turkey, Jul. 1-4, 2012. pp. 423-429. http://dx.doi.org/10.1109/ISCC.2012.6249333
- Jim Bardgett, Cliff C. Zou, "nSwitching: Virtual Machine Aware Relay Hardware Switching to improve intra-NIC Virtual Machine Traffic", in IEEE International Conference on Communications, (ICC), Ottawa, Canada, Jun. 10-15, 2012. pp. 2700-2705. http://dx.doi.org/10.1109/ICC.2012.6363879
- Feldman S. (graduate student), LaBorde P. (graduate student), Dechev D., "Concurrent Multi-level Arrays: Wait-free Extensible Hash Maps", In Proceedings of the 13th IEEE International Conference on Embedded Computer Systems: Architectures, Modeling, and Simulation (SAMOS XIII), Samos, Greece, July 15-18, 2013.
- Sottile M., Dakshinamurhty A. (graduate student), Hendry G., Dechev D., "Semi- Automatic Extraction of Software Skeletons for Benchmarking Large-Scale Parallel Applications", In Proceedings of the 2013 ACM

- SIGSIM Conference on Principles of Advanced Discrete Simulation (ACM PADS 2013), Montreal, Canada, May 19-22, 2013. Acceptance Rate: 29/75 = 38%.
- Bottisti D. (graduate student), Mendez L. (graduate student), Dechev D., "CuNeuQuant: A CUDA
  Implementation of the NeuQuant Image Quantization Algorithm", In Proceedings of the 16th International
  Conference on Image Processing, Computer Vision, and Pattern Recognition (IPCV 2012), Las Vegas, NV, July
  16-19, 2012. Acceptance Rate: 28%.
- Vidal A. (graduate student), Dechev D., Kassab A., "Evaluation of two acceleration techniques in a multithreaded 2D Poisson equation solver", In Proceedings (Elsevier) of the International Conference on Computational Science (ICCS 2012), Omaha, Nebraska, June 4-6, 2012. Acceptance Rate: 35%.
- Turgut D., and L. Bölöni, "IVE: improving the value of information in energy-constrained intruder tracking sensor networks," Proceedings of 2013 IEEE ICC, Budapest, Hungary, June 9-13, 2013.
- Solmaz(\*) G., and D. Turgut, "Event Coverage in Theme Parks Using Wireless Sensor Networks with Mobile Sinks," Proceedings of 2013 IEEE ICC, Budapest, Hungary, June 9-13, 2013.
- Akbas(\*) M.I., Raghu Avula(\*), M. Bassiouni, and D. Turgut, "Social Network Generation and Friend Ranking Based on Mobile Phone Data," Proceedings of 2013 IEEE ICC, Budapest, Hungary, June 9-13, 2013. 4.
- Solmaz(\*) G., M.I. Akbas(\*), and D. Turgut, "Modeling Visitor Movement in Theme Parks," Proceedings of 2012 IEEE P2MNet, Clearwater, USA, October 21-14, 2012, pp. 36–42.
- Kopman(\*) S., M.I. Akbas(\*), and D. Turgut, "EpidemicSim: Epidemic Simulation System with Realistic Mobility," Proceedings of 2012 IEEE P2MNet, Clearwater, USA, October 21-14, 2012pp. 663–669.
- Horine(\*) B., L. Bölöni, and D. Turgut, "Argumentation Based Negotiation in Cognitive Radio Networks," Proceedings of 2012 IEEE WLN, Clearwater, USA, October 21-14, 2012, pp. 786–793.
- Turgut D., and L. Bölöni, "A pragmatic value-of-information approach for intruder tracking sensor networks," Proceedings of 2012 IEEE ICC, Ottawa, Canada, June 10-15, 2012, pp. 4931-4936.
- Akbas(\*) M.I., G. Solmaz(\*), and D. Turgut, "Actor Positioning Based on Molecular Geometry in Aerial Sensor Networks," Proceedings of 2012 IEEE ICC, Ottawa, Canada, June 10-15, 2012. pp. 508–512.
- Brust M.R., D. Turgut, C.H.C. Ribeiro, and M. Kaiser, "Is the Clustering Coefficient a Measure for Fault Tolerance in Wireless Sensor Networks?," Proceedings of the 2012 IEEE ICC, Ottawa, Canada, June 10-15, 2012, pp. 183–187.
- "A Cloud Service for Adaptive Digital Music Streaming," Proc 8th Int. Conf on Signal Image Technology and Internet-based System, CD Proceedings, 2012. With A. Paya a graduate student.
- A. Schwartz, F. Gomez and L. Ungar "Improving Supervised Sense Disambiguation with Web-Scale Selectors," {\text{\cm Proceedings of the 24th International Conference on Computational Linguistics, Coling-24}, Mumbai, India, December 8-15, 2012, pp. 2423-2439.
- S. Szumlanski, F. Gomez and V. Sims ``A new set of norms for semantic relatedness measures" {\emproceedings of the 51th Annual Meeting of the Association for Computational Linguistics, ACL-2013}, Sofia, Bulgaria, August 4-9, 2013 (to appear)
- A. Hall and F. Gomez `Using an automatically generated Dictionary and a Classifier to identify a Person's profession in tweets. {\em Proceedings of the 26th International FLAIRS conference}, St. Pete Beach, FL, May 22-24, 2013 (to appear)
- A. Tarik, A. Kim, F. Gomez and H. Foroosh `Exploiting Topical Perceptions over Multilingual Texts for Hashtag Suggestion," {\emproceedings of the 26th International FLAIRS conference}, St. Pete Beach, FL, May 22-24, 2013 (to appear) Note: The Coling conference (a biennial conference) and the ACL conferences are the top conferences in Computational Linguistics. The two papers in FLAIRS will appear within a week of writing this report.

- Tan, S.H, D. Marinov, L. Tan and G. T. Leavens, "@tComment: Testing Javadoc Comments to Detect Comment-Code Inconsistencies," Fifth International Conference on Software Testing, Verification and Validation (ICST 2012), Montreal, Canada, April 2012, pp. 260-269. http://doi.ieeecomputersociety.org/10.1109/ICST.2012.106
- Beheshti\*, R. and G. Sukthankar. "Improving Markov Chain Monte Carlo estimation with agent-based models." Proceedings of the International Conference on Social Computing, Behavioral Cultural Modeling, and Prediction, Washington, D.C., April 2-5, 2013. pp. 495–502.
- Osipov-Lvoff\*, K. and G. Sukthankar. "Forming effective teams from agents with diverse skill sets." Proceedings of the ASE/IEEE International Conference on Social Informatics, Washington, D.C., December 14-16, 2012. pp. 44–48.
- Beheshti\*, R. and G. Sukthankar. "Extracting agent-based models of human transportation patterns." Proceedings of the ASE/IEEE International Conference on Social Informatics, Washington, D.C., December 14-16, 2012. pp. 157–164.
- Davami\*, E. and G. Sukthankar. "Online learning of user-specific destination prediction models." Proceedings of the ASE/IEEE International Conference on Social Informatics, Washington, D.C., December 14-16, 2012. pp 40– 43
- Zhao\*, L., G. Sukthankar, and R. Sukthankar. "Importance-weighted label prediction for active learning with noisy annotations." Proceedings of the IAPR/IEEE International Conference on Pattern Recognition, Tsukuba Science City, Japan, November 11-15, 2012. pp. 3476–3479.
- Tastan\*, B., Y. Chang, and G. Sukthankar. "Learning to intercept opponents in first person shooter games. Proceedings of the IEEE Conference on Computational Intelligence in Games, Granada, Spain, September 11-14, 2012. pp. 100–107.
- Folsom-Kovarik\*, J. G. Sukthankar, and S. Schatz. "Integrating learner help requests using a POMDP in an adaptive training system." Proceedings of the AAAI Conference on Innovative Applications of Artificial Intelligence, Toronto, CA, July 22-26, 2012. pp. 2287–2292.
- Maghami\*, M. and G. Sukthankar. "Identifying influential agents for advertising in multi-agent markets." Proceedings of International Conference on Autonomous Agents and Multi-Agent Systems, Valencia, Spain, June 4-9, 2012. pp. 687–694.
- Lewis\*, B. and G. Sukthankar. "Configurable human-robot interaction for multi-robot manipulation tasks (extended abstract)." Proceedings of International Conference on Autonomous Agents and Multi-Agent Systems, Valencia, Spain, June 4-9, 2012. pp. 1219–1220.
- Ding J#, Hu H, Li X. "NIM, A novel computational method for predicting nuclear-encoded chloroplast proteins", International Conference On Bioinformatics and Computational Biology, April. 2013, Beijing, China. (#: student coauthor)
- Ding J#, Cai X, Wang Y, Hu H, Li X. "ChIPModule: Systematic discovery of transcription factors and their cofactors from ChIP-seq data", Pac Symp Biocomput. January, 2013, Big Island of Hawaii. (#: student coauthor)
- Nazim Ashraf, Chuan Sun, Hassan Foroosh, Motion Retrival using Low-Rank Decomposition of Fundamental Ratios, Proc. IEEE International Conference on Image Processing (ICIP), submitted, 2012.
- Nazim Ashraf, Hassan Foroosh, Human Action Recognition in Video Data Using Invariant Characteristic Vectors, Proc. IEEE International Conference on Image Processing (ICIP), submitted, 2012.
- Chuan Sun and Hassan Foroosh, Action Recognition using Rank-1 Approximation of Joint Self-Similarity Volume, International Conference on Computer Vision (ICCV), pp. 1007-1012, 2012.
- Schild. J., Bölicke, L., LaViola J., and M. Masuch, "Creating and Analyzing Stereoscopic 3D Game Interfaces," Proceedings of the 2013 ACM Annual Conference on Human Factors in Computing Systems (CHI 2013), Paris, France, April 2013, pp. 169-178.

- Cashion, J., Wingrave, C., and J. LaViola, "Optimal 3D Selection Technique Assignment Using Real Time Contextual Analysis," Proceedings of the IEEE Symposium on 3D User Interfaces 2013, Orlando, FL, March 2013, pp. 107-110.
- Kulshreshth, A., \*Zorn, C., and J. LaViola, "Real-time Markerless Kinect based Finger Tracking and Hand Gesture Recognition for HCI," Proceedings of the IEEE Symposium on 3D User Interfaces 2013, Orlando, FL, March 2013, pp. 187-188. UCF/CECS/FAR (revised 04/12) 5
- Cashion, J., Wingrave, C., and J. LaViola, "Automatic 3D Selection Technique Assignment Using Real-time Scenario Analysis," Proceedings of IEEE Virtual Reality 2013, Orlando, FL, March 2013, pp. 103-104.
- Pfeil, K., \*Koh, S., and J. LaViola, "Exploring 3D Gesture Metaphors for Interaction with Unmanned Aerial Vehicles," Proceedings of the 2013 ACM International Conference on Intelligent User Interfaces, Santa Monic, CA, March 2013, pp. 257-266.
- Williamson, B., LaViola, J., Roberts, T., and P. Garrity, "Multi-Kinect Tracking for Dismounted Soldier Training," Proceedings of the Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC) 2012, Orlando, FL, December 2012, pp. 1727-1735.
- Reiss, S., \*Bott, J., and J. LaViola, "Code Bubbles: A Practical Working-Set Programming Environment,", Proceedings of the 34th International Conference on Software Engineering (ICSE 2012), Zurich Switzerland, June 2012, pp. 1411-1414.
- Cossairt, T. and J. LaViola, "SetPad: A Sketch-Based Tool For Exploring Discrete Math Set Problems," Proceedings of the Ninth Eurographics/ACM Symposium on Sketch-Based Interfaces and Modeling 2012, Annecy, France, June 2012, pp. 47-56.
- Kulshreshth, A., Schild, J., and J. LaViola, "Evaluating User Performance in 3D Stereo and Motion Enabled Video Games," Proceedings of the International Conference on the Foundations of Digital Games 2012, Raleigh, NC, May 2012, pp. 33-40.
- Risi\* S., J. Lehman\*, D. B. D'Ambrosio\*, and K. O. Stanley, "Combining Search-based Procedural Content Generation and Social Gaming in the Petalz Video Game," Proceedings of the Artificial Intelligence and Interactive Digital Entertainment Conference (AIIDE 2012), Palo Alto, CA, October 8-12, 2012, pp. 63-68. http://www.aaai.org/ocs/index.php/AIIDE/AIIDE12/paper/view/5449/5698
- D'Ambrosio D. B., S. Goodell\*, J. Lehman\*, S. Risi\*, and K. O. Stanley, "Multirobot Behavior Synchronization through Direct Neural Network Communication," Proceedings of the 5th International Conference on Intelligent Robotics and Applications (ICIRA-2012), Montreal, Canada, October 3-5, 2012, pp. 603-614. http://dx.doi.org/10.1007/978-3-642-33515-0 59 One of 5 (out of 198) Best Paper Award Finalists
- Risi\*, S. and K. O. Stanley, "A Unified Approach to Evolving Plasticity and Neural Geometry," Proceedings of the International Joint Conference on Neural Networks (IJCNN 2012), Brisbane, Australia, June 10-15, 2012, pp. 1-8. http://dx.doi.org/10.1109/IJCNN.2012.6252826 Winner of the Best Student Paper Award at IJCNN (out of 299 papers submitted with student first authors)
- Lehman\* J. and K. O. Stanley, "Beyond Open-endedness: Quantifying Impressiveness," Proceedings of the Thirteenth International Conference on Artificial Life (ALIFE XIII), East Lansing, MI, July 19-22, 2012, pp. 75-82. http://dx.doi.org/10.7551/978-0-262-31050-5-ch011
- Lehman\* J., S. Risi\*, D. B. D'Ambrosio, and K. O. Stanley, "Rewarding Reactivity to Evolve Robust Controllers without Multiple Trials or Noise," Proceedings of the Thirteenth International Conference on Artificial Life (ALIFE XIII), East Lansing, MI, July 19-22, 2012, pp. 379-386. http://dx.doi.org/10.7551/978-0-262-31050-5-cb050
- Hoover\* A. K., P. A. Szerlip\*, M. E. Norton\*, T.A. Brindle\*, Z. Merritt\*, and K. O. Stanley, "Generating a Complete Multipart Musical Composition from a Single Monophonic Melody with Functional Scaffolding," Proceedings of the Third International Conference on Computational Creativity} (ICCC-2012), Dublin, Ireland, May 30-June 5, pp. 111-118. http://computationalcreativity.net/iccc2012/wp-content/uploads/2012/05/111-Hoover.pdf

- Jun Ye (Graduate) and Kien A. Hua, "Exploiting Depth Camera for 3D Spatial Relationship Interpretation," Proceedings of ACM Multimedia Systems Conference, February 27 March 1, 2013, pp. 151-161. http://www.mmsys.org/?q=node/83/
- Vaithiyanathan Sundaram (Graduate) and Kien A. Hua, "Seamless Video Streaming: A Light Weight Session Handoff Scheme for Dynamic Stream Merging based Wireless Mesh Networks," Proceedings of ICME Workshop on Emerging Multimedia Systems and Applications, July 9-13, 2012, pp. 107-112.
   10.1109/ICMEW.2012.26
- Kien A. Hua, Steven Nichols (Undergraduate), Vaithiyanathan Sundaram (Graduate) and Fei Xie (Graduate), "Novel Wireless Routers for Seamless Sharing of Video Access in Multihop Networks," Demo at IEEE Conference on Multimedia & Expo 2012, July 9 13, 2012.
- Kai Li (Graduate) and Kien A. Hua, "Mobile Data Collection Networks for Wireless Sensor Networks," in Proceedings of 5th International Conference on Multimedia Communications, Services and Security, May 31 June 1, 2012, pp. 200-211. http://link.springer.com/chapter/10.1007%2F978-3-642-30721-8 20
- Bhatia, T.S., \*S.A. Khan, and L. Bölöni, "A modeling framework for inter-cultural social interactions", Proc of the Second Int. Workshop on Human-Agent Interaction Design and Models (HAIDM-13), St.Paul, MN, May 2013, pp. 16–31.
- Bhatia, T.S., \*S.A. Khan, and L. Bölöni, "Towards an operational model for the propagation of public perception in multi agent simulation". Proc. of 13th International Workshop on Multi-Agent Based Simulation (MABS-2012), Valencia, Spain, June 2012, pp. 1–12.
- Bölöni, L.. "The Spanish Steps flower scam agent-based modeling of a complex social interaction". Proc. of 11th Int. Conf. on Autonomous Agents and Multiagent Systems (AAMAS 2012), Valencia, Spain, June 2012, pp. 1345–1346.
- Horine . B., L. Bölöni, and D. Turgut. "Argumentation based negotiation in cognitive radio networks". Proc. Of 12th IEEE International Workshop on Wireless Local Networks, Clearwater FL, October 2012, pp. 782–789, 2012. DOI 10.1109/LCNW.2012.6424064
- Khan, S. A., \*T.S. Bhatia, S. Parker, and L. Bölöni. "Modeling human-robot interaction for a market patrol task". Proc. of 25th International FLAIRS Conference, Marco Island, FL, May 2012, pp. 50–55.
- Luo Y. and L. Bölöni. "Modeling the conscious behavior of drivers for multi-lane highway driving". Proc. of 7th International Workshop on Agents in Traffic and Transportation (ATT-2012), Valencia, Spain, June 2012, pp. 95–103.
- D. Turgut and L. Bölöni. "A pragmatic value-of-information approach for intruder tracking sensor networks".
   Proc. of IEEE Int. Conf. on Communications (ICC-2012), Ottawa, Canada, June 2012, pp. 4931–4936, DOI 10.1109/ICC.2012.6364380
- P. Joon, C. Kamhoua, M. Chatterjee, and K. Kwiat "Replication and Diversity for Survivability in Cyberspace: A
  Game Theoretic Approach", 8th International Conference on Information Warfare and Security (ICIW) 2013,
  Denver, CO, 25-26 March,
- S.S. Nair, S. Schellenberg, J. Seitz, M. Chatterjee, "Hybrid Spectrum Sharing in Dynamic Spectrum Access Networks", International Conference on Information Networking (ICOIN), Bangkok, Thailand, Feb 10-13, 2013, 3.
- S. Brahma, P.K. Varshney and M. Chatterjee, M
   Optimal Content Delivery in DSA Networks: A Path Auction based Framework,
   IEEE International Conference on Communications (ICC), June 10-15 2012, Ottawa, Canada.
- F. Sadeghi\* and M. F. Tappen, "Latent Pyramidal Regions for Recognizing Scenes," Proceedings of the 2012 European Conference on Computer Vision Florence, Italy, 2012, Vol. 5, pp. 228-241 (Acceptance Rate: 28.4%)
- M. F. Tappen and C. Liu, "A Bayesian Approach to Alignment-based Image Hallucination" Proceedings of the 2012 European Conference on Computer Vision Florence, Italy, 2012 Vol.7,pp. 236-249, 2012 (Acceptance Rate: 28.4%)
- Nathaniel R. Twarog\*, Marshall F. Tappen, Edward H. Adelson, "Playing with Puffball: Simple Scale-Invariant Inflation for Use in Vision and Graphics", Appeared in the ACM Symposium on Applied Perception

- Nazar Khan\* and Marshall F. Tappen, "Stable Discriminative Dictionary Learning via Discriminative Deviation", Proceedings of the 2012 International Conference(Accepted for Oral Presentation, Rate: 16.4%)
- Tariq S., M. Bassiouni, and G. Li, "Improving Fairness of OBS Routing Protocols in Multimode Fiber Networks" Proceedings of IEEE International Conference on Computing, Networking and Communications (ICNC 2013), San Diego, CA, USA, January 28-31, 2013, pp. 1146-1150.
- Alabrah A., and M. Bassiouni, "A Hierarchical Two-Tier One-way Hash Chain Protocol for Secure Internet Transactions", Proceedings of the IEEE GLOBECOM 2012 Conference- Communication and Information System Security Symposium, Anaheim, CA, December 3-7, 2012.
- Akbas M., R. Avula, M. Bassiouni, and D. Turgut, "Social Network Generation and Friend Ranking Based on Mobile Phone Data" accepted for publication in Proceedings of the IEEE International Communications Conference Ad-hoc and Sensor Networking Symposium (ICC'13 AHSN), Budapest, Hungary, June 9-13, 2013. Note: the above three conferences have roughly the same level of quality and reputation. The acceptance rate of ICNC 2013 is 25.2% and the acceptance rate of Globecom 2012 is 37.7%.
- Idrees, H., I. Saleemi, and M. Shah, "Statistical Inference of Motion in the Invisible", Proceedings of European Conference on Computer Vision 2012, Florence, Italy, October 7-13, 2012, pp. 544-557. http://dx.doi.org/10.1007/978-3-642-33765-9\_39
- Dey, S., V. Reilly, I. Saleemi, and M. Shah, "Detection of Independently Moving Objects in Non-Planar Scenes via Multi-Frame Monocular Epipolar Constraint", Proceedings of European Conference on Computer Vision 2012, Florence, Italy, October 7-13, 2012, pp. 860-873. http://dx.doi.org/10.1007/978-3-642-33715-4\_62
- Izadinia, H., and M. Shah, "Recognizing Complex Events using Large Margin Joint Low-Level Event Model", Proceedings of European Conference on Computer Vision 2012, Florence, Italy, October 7-13, 2012, pp. 430-444. http://dx.doi.org/10.1007/978-3-642-33765-9\_31
- Izadinia, H., I. Saleemi, W. Li, and M. Shah, "(MP)2T: Multiple People Multiple Parts Tracker", Proceedings of European Conference on Computer Vision 2012, Florence, Italy, October 7-13, 2012, pp. 100-114. http://dx.doi.org/10.1007/978-3-642-33783-3
- Roshan Zamir, A., A. Dehghan, and M. Shah, "GMCP-Tracker: Global Multi-object Tracking Using Generalized Minimum Clique Graphs", Proceedings of European Conference on Computer Vision 2012, Florence, Italy, October 7-13, 2012, pp. 343-356. http://dx.doi.org/10.1007/978-3-642-33709-3\_25
- Yang, Y., and M. Shah, "Complex Events Detection using Data-driven Concepts", Proceedings of European Conference on Computer Vision 2012, Florence, Italy, October 7-13, 2012, pp. 722-735. http://dx.doi.org/10.1007/978-3-642-33712-3 52
- Vaca-Castano, G., A. Roshan Zamir, and M. Shah, "City Scale Geo-Spatial Trajectory Estimation of a Moving Camera", Proceedings of 2012 Conference on Computer Vision and Pattern Recognition, Providence, RI, June 16-21, 2012, pp. 1186-1193. http://dx.doi.org/10.1109/CVPR.2012.6247800
- Shu, G., A. Dehghan, O. Oreifej, E. Hand, and M. Shah, "Part-based Multiple-Person Tracking with Partial Occlusion Handling", Proceedings of 2012 Conference on Computer Vision and Pattern Recognition, Providence, RI, June 16-21, 2012, pp. 1815-1821. http://dx.doi.org/10.1109/CVPR.2012.6247879
- Dehghan, A., H. Idrees, A. Roshan Zamir, and M. Shah, "Keynote: Automatic Detection and Tracking of Pedestrians in Videos with Various Crowd Densities", Proceedings of 6th International Conference on Pedestrian and Evacuation Dynamics, Zurich, Switzerland, June 6-8, 2012.
- Ajit Hakke-Patil, Daniele Bernabei, Charly Collin, Ke Chen, S. N. Pattanaik, Fabio Ganovelli, "Parallel MDOM for light transport in participating media", Proceedings of 29th Spring Conference of Computer Graphics, 1-3 May, 2013, Smolenice castle, Slovakia.
- Sik Lingling, S. N. Pattanaik, "Real-Time Fusion of Surveillance Imageries in Urban Scenes", Proceedings of I/ITSEC, Dec 3-6, 2012, Florida.
- Sik Lingling, S. N. Pattanaik, "Fusing geo-referenced images for urban scene", Proceedings of 15th International Conference on Information Fusion, 9-12 July 2012, Singapore.

- Charly Collin, Ke Chen, Ajit Hakke-Patil, S. N. Pattanaik, Kadi Bouatouch, "Green's function solution to subsurface light transport for BRDF computation", Proceedings of 29th Spring Conference of Computer Graphics, 1-3 May, 2013, Smolenice castle, Slovakia.
- Ke Chen, Charly Collin, Ajit Hakke-Patil, S. N. Pattanaik, "A practical model for computing the BRDF of real world materials", Poster, I3D 2013, March 21-23, Orlando, Florida (http://dx.doi.org/10.1145/2448196.2448228)
- Evan Husk, Avelino J. Gonzalez and S. N. Pattanaik, "Learning Individualized Facial Expressions in an Avatar with PSO and Tabu Search", Proceedings of the 26th International FLAIRS Conference, May 22 24, 2013, Florida.
- Gruson A., Ajit Hakke Patil, R. Cozot, K. Bouatouch, S. N. Pattanaik, "Light Propagation Maps on Parallel Graphics Architecture", Proceedings of Eurographics Symposium on Parallel Graphics Architecture (EGPGV'12), Cagliari, Italy, May 13-14, 2012, pp. 81-88. (DOI:10.2312/EGPGV/EGPGV12/081-088)
- Arup Kumar Ghosh\*, Faraz Hussain\*, Sumit K. Jha, Christopher J. Langmead and Susmit Jha: Decision Procedure Based Discovery of Rare Behaviors in SDE Models of Biological Systems: Applications to Minimal Cell Cycle Model. IEEE International Conference on Computational Advances in Bio and Medical Sciences (ICCABS), pp. 1 6, Las Vegas, NV. Acceptance Rate: 25/55.
- Faraz Hussain\*, Raj Gautam Dutta\*, Sumit Kumar Jha, Christopher James Langmead, Susmit Jha: Parameter discovery for stochastic biological models against temporal behavioral specifications using an SPRT based Metric for simulated annealing. ICCABS 2012, pp. 1 6, Las Vegas.
- Aditya Reddy Kolli, Frank Sommerhage, Peter Molnar, Jonathan E. Hood, Jerry J. Jenkins, Faraz Hussain\*, Arup K.Ghosh\*, Sumit Kumar Jha, James J. Hickman: A computational metabolic model of the NG108-15 cell for high content drug screening with electrophysiological readout. ACM BCB 2012, pp. 530-532, Orlando, FL.
- Sumit Kumar Jha, Raj Gautam Dutta\*, Christopher James Langmead, Susmit Jha and Emily Sassano: Synthesis of Insulin Pump Controllers from Safety Specifications using Bayesian Model Validation. The Tenth Asia Pacific Bioinformatics (APBC) 2012. Acceptance Rate: 42/129

## **Conference Publication without Proceedings**

- Dechev D., Deo N., "Multiprocessor Programming in the Undergraduate Program NSF/TCPP Curriculum: 2nd Year of Early Adoption at the University of Central Florida", In Proceedings of the Second NSF/TCPP Workshop on Parallel and Distributed Computing Education (EduPar 12), 26th IEEE International Parallel & Distributed Processing Symposium (IPDPS), Shanghai, China, May 21, 2012.
- Peter Jacques, Claire Knox, and Gita Sukthankar. From Rio to Resistance: Direct observation of the climate denial counter-movement in social media. In Proceedings of the International Studies Association National Convention, San Francisco, April 2013. (National)
- Peter Jacques, Claire Knox, and Gita Sukthankar. Tweeting Sandy: Observed climate risk amplification before, during, and after hurricane sandy. In Proceedings of the National Conference on Science, Policy, and the Environment, Washington, D.C., January 2013. (National)
- Bennie Lewis\* and Gita Sukthankar. Configurable human-robot interaction for multi-robot manipulation tasks. In AAMAS Workshop on Autonomous Robots and Multi-robot Systems, pages 51–70, Valencia, Spain, June 2012. (International)
- Bennie Lewis\* and Gita Sukthankar. Learning macros for multi-robot tasks. In Florida Conference on Recent Advances in Robotics, Boca Raton, FL, May 2012. (Regional) 5.

- Bulent Tastan\*, Yuan Chang\*, and Gita Sukthankar. Learning motion prediction models for opponent interception (abstract). In Proceedings of Florida Artifical Intelligence Research Society, Marco Island, FL, May 2012. (National).
- Jerald, J., Marks, R., LaViola, J., Murphy, B., Steury, K., and Rubin, A. "The Battle for Motion-Controlled Gaming and Beyond", ACM SIGGRAPH 2012, August 2012. (International)
- Deo, N., Dechev, D., and Mota D., "Multiprocessor Programming in the Undergraduate Program: Early Adoption 2nd Year" NSF/TCPP Workshop on Parallel and Distributed Computing Education (EduPar-12), May 21, 2012, Shanghai, China. International
- Deo, N., "Local Traversal in Complex Networks for Identifying Communities," invited lecture at the NSCED (Networks and Systems for Communication and Data Processing), Porto, Portugal, July 1-3, 2012. International
- A. Petkova, N. Deo, and S. K. Jha, "Learning Discriminative Complex Network Models for Analyzing Flow Cytometry Big Data," 44th Southeastern International Conference on Combinatorics, Graph Theory, and Computing, Boca Raton. FL, March 4-8, 2013. International
- Sumit Kumar Jha and Arvind Ramanathan: Quantifying Uncertainty in Epidemiological Models. Workshop on Verification and Validation of Epidemiological Models held in conjunction with BioMedCom, Washington D.C., December 2012.
- Narsingh Deo, Sumit Kumar Jha, Faraz Hussain\* and Mahadevan Vasudevan: Introducing parallel programming
  across the undergraduate curriculum through an interdisciplinary course on computational modeling. Third
  NSF/TCPP Workshop on Parallel and Distributed Computing Education (EduPar-13) In conjunction with 27th
  IEEE International Parallel & Distributed Processing Symposium, Hyatt Regency Cambridge, Boston,
  Massachusetts USA, May 2013 (poster paper).
- Narsingh Deo, Raj Gautam Dutta\*, Faraz Hussain\*, Susmit Jha, and Sumit Kumar Jha: Synthesizing Optimal Control Strategies for Stochastic Complex Networks. CoNeD'13 workshop affiliated with the 14th International Conference on Distributed Computing and Networking ICDCN'2013, Tata Institute of Fundamental Research, Bombay, India, January 2013.