

Publications

Journal Papers

In Print

1. J.A. Bucklew, S. Nitinawarat and J. Wierer, “Universal Simulation Distributions,” *IEEE Trans. Inf. Theory*, vol. 50, no.11, pp. 2674-2685, November 2004.
2. S. Nitinawarat, C. Ye, A. Barg, P. Narayan and A. Reznik, “Secret Key Generation for a Pairwise Independent Network Model,” *IEEE Trans. Inf. Theory*, vol. 56, no. 12, pp. 6482-6489, December 2010.
3. S. Nitinawarat and P. Narayan, “Perfect Omniscience, Perfect Secrecy and Steiner Tree Packing,” *IEEE Trans. Inf. Theory*, vol. 56, no. 12, pp. 6490-6500, December 2010.
4. S. Nitinawarat and P. Narayan, “Secret Key Generation for Correlated Gaussian Sources,” *IEEE Trans. Inf. Theory*, vol. 58, no. 6, pp. 3373-3391, June 2012.
5. S. Nitinawarat, “On the Deterministic Code Capacity Region of an Arbitrarily Varying Multiple-Access Channel Under List Decoding,” *IEEE Trans. Inf. Theory*, vol. 59, no. 5, pp. 2683-2693, May 2013.
6. S. Nitinawarat, G. K. Atia and V. V. Veeravalli, “Controlled Sensing for Multihypothesis Testing,” *IEEE Trans. Autom. Control*, vol. 58, no. 10, pp. 2451-2464, October 2013.
7. Y. Li, S. Nitinawarat and V. V. Veeravalli, “Universal Outlier Hypothesis Testing,” *IEEE Trans. Inf. Theory*, vol. 60, no. 7, pp. 4066-4082, July 2014.
8. S. Nitinawarat and V. V. Veeravalli, “Controlled Sensing for Sequential Multihypothesis Testing with Controlled Markovian Observations and Non-Uniform Control Cost,” *Sequential Analysis: Design Methods and Applications*, vol. 34, no. 1, pp. 1-24, January 2015.
9. S. Nitinawarat and V. V. Veeravalli, “Universal Scheme for Optimal Search and Stop,” *Bernoulli*, vol. 23, no. 3, pp. 1759-1784, August, 2017.
10. Y. Li, S. Nitinawarat and V. V. Veeravalli, “Universal Sequential Outlier Hypothesis Testing,” *Sequential Analysis: Design Methods and Applications*, vol. 36, no. 3, pp. 309-344, September 2017.

In Preparation

11. S. Nitinawarat and V. V. Veeravalli, “Universal Quickest Outlier Detection and Isolation.”

Conference Papers

1. S. Nitinawarat, A. Meylan, and S. Veerepalli, “TCP Mitigation for Concurrent RAT-Capable User Equipments,” QTech, Qualcomm Inc., San Diego, USA, June 28-30, 2016.

2. S. Nitinawarat and V. V. Veeravalli, "Universal Quickest Outlier Detection and Isolation," presented at *IEEE Int. Symp. Inf. Theory*, Hong Kong, China, June 14-June 19, 2015.
3. Y. Li, S. Nitinawarat, and V. V. Veeravalli, "Universal Outlier Hypothesis Testing: Application to Anomaly Detection," presented at *IEEE Int. Conf. Acoust., Speech, and Signal Process.*, Brisbane, Australia, April 19-24, 2015, **invited paper**.
4. S. Nitinawarat and V. V. Veeravalli, "Universal Scheme for Optimal Search and Stop," *Proc. Inf. Theory and Applicat. Workshop*, San Diego, CA, February 1-6, 2015, pp. 1-5, **invited paper**.
5. Y. Li, S. Nitinawarat and V. V. Veeravalli, "Universal Sequential Outlier Hypothesis Testing," *Proc. 48th Annu. Asilomar Conf. Signals, Syst. and Comput.*, Pacific Grove, CA, USA, November 2-5, 2014, pp. 281-285, **invited paper**.
6. Y. Li, S. Nitinawarat and V. V. Veeravalli, "Universal Sequential Outlier Hypothesis Testing," *Proc. IEEE Int. Symp. Inf. Theory*, Honolulu, HI, USA, June 29-July 4, 2014, pp. 3205-3209 (same title as **3**; the former has additional results).
7. Y. Li, S. Nitinawarat and V. V. Veeravalli, "Universal Multiple Outlier Hypothesis Testing," *Proc. 5th IEEE Int. Workshop Computational Advances in Multi-Sensor Adaptive Process.*, Saint Martin, December 15-18, 2013, pp. 177-180.
8. S. Nitinawarat and V. V. Veeravalli, "Controlled Sensing for Sequential Hypothesis Testing with Non-Uniform Sensing Cost," *Proc. 47th Annu. Asilomar Conf. Signals, Syst. and Comput.*, Pacific Grove, CA, USA, November 3-6, 2013, pp. 1095-1099.
9. S. Nitinawarat and V. V. Veeravalli, "Controlled Sensing for Multihypothesis Testing Based on Markovian Observations," *Proc. IEEE Int. Symp. Inf. Theory*, Istanbul, Turkey, July 7-12, 2013, pp. 2199-2203.
10. Y. Li, S. Nitinawarat and V. V. Veeravalli, "Universal Outlier Hypothesis Testing," *Proc. IEEE Int. Symp. Inf. Theory*, Istanbul, Turkey, July 7-12, 2013, pp. 2666-2670.
11. Y. Li, S. Nitinawarat and V. V. Veeravalli, "Universal Outlier Detection," *Proc. Inf. Theory and Applicat. Workshop*, San Diego, CA, February 10-15, 2013, pp. 1-5, **invited paper**.
12. S. Nitinawarat, G. K. Atia and V. V. Veeravalli, "Controlled Sensing for Hypothesis Testing," *Proc. IEEE Int. Conf. Acoust., Speech, and Signal Process.*, Kyoto, Japan, March 25-30, 2012, pp. 5287-5280.
13. S. Nitinawarat, G. K. Atia and V. V. Veeravalli, "Efficient Target Tracking using Mobile Sensors," *Proc. 4th IEEE Int. Workshop Computational Advances in Multi-Sensor Adaptive Process.*, San Juan, Puerto Rico, December 13-16, 2011, pp. 405-408.
14. S. Nitinawarat, "On Maximal Error Capacity Regions of Symmetric Gaussian Multiple-Access Channels," *Proc. IEEE Int. Symp. Inf. Theory*, Saint Petersburg, Russia, July 31-August 5, 2011, pp. 2269-2273.

15. S. Nitinawarat, "On the Deterministic Code Capacity Region of an Arbitrarily Varying Multiple-Access Channel Under List Decoding," *Proc. IEEE Int. Symp. Inf. Theory*, Austin, TX, USA, June 13-18, 2010, pp. 290-294, **finalist for best student paper award**.
16. S. Nitinawarat and P. Narayan, "Perfect Secrecy and Combinatorial Tree Packing," *Proc. IEEE Int. Symp. Inf. Theory*, Austin, TX, USA, June 13-18, 2010, pp. 2622-2626.
17. S. Nitinawarat, C. Ye, A. Barg, P. Narayan and A. Reznik, "Perfect Secrecy, Perfect Omniscience and Steiner Tree Packing," *Proc. IEEE Int. Symp. Inf. Theory*, Seoul, Korea, June 28-July 3, 2009, pp. 1288-1292.
18. S. Nitinawarat, C. Ye, A. Barg, P. Narayan and A. Reznik, "Common Randomness, Multiuser Secrecy and Tree Packing," *Proc. 46th Annu. Allerton Conf. Commun., Control, and Computing*, Monticello, IL, USA, September 23-26, 2008, pp. 217-220, **invited paper**.
19. S. Nitinawarat, "Secret Key Generation for Correlated Gaussian Sources," *Proc. IEEE Int. Symp. Inf. Theory*, Toronto, Ontario, Canada, July 6-11, 2008, pp. 702-706, **invited paper**.
20. S. Nitinawarat, C. Ye, A. Barg, P. Narayan and A. Reznik, "Secret Key Generation for a Pairwise Independent Network Model," *Proc. IEEE Int. Symp. Inf. Theory*, Toronto, Ontario, Canada, July 6-11, 2008, pp. 1015-1019.
21. S. Nitinawarat, "Secret Key Generation for Correlated Gaussian Sources," *Proc. 45th Annu. Allerton Conf. Commun., Control, and Computing*, Monticello, IL, USA, September 26-28, 2007, pp. 1054-1058 (same title as **17**; the former has additional results).
22. S. Nitinawarat and N. Boston, "A Complete Analysis of Space-time Group Codes," *Proc. 43th Annu. Allerton Conf. Commun., Control, and Computing*, Monticello, IL, USA, September 28-30, 2005.

Patents

1. S. Nitinawarat, A. Meylan and S. Veerepalli, "Mitigation of Transmission Control Protocol Throughput Degradation in Communication Devices Due to Predictable Radio Impairment Events," U.S. Published, 20180041415, February 8, 2018.
2. A. Venkatesh, A. Mitra, S. R. Mudireddy, G. S. Chhabra, A. Meylan, S. Nitinawarat, V. Kumar, S. Nair and N. Somani, "Transport Protocol Communications Reduction," U. S. Granted, 9876613, January 23, 2018.