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STUDENT PUBLICATIONS IN REFEREED JOURNALS

- Vargas Tamayo, L., Thron, C., Fendji, J. L. K. E., Thomas, S. K., & Förster, A. (2020). Cost-Minimizing System Design for Surveillance of Large, Inaccessible Agricultural Areas Using Drones of Limited Range. *Sustainability*, 12(21), 8878.
- Laver, T., Brandt, L., Thron, C., "Budget Reconciliation through Dynamic Programming", in *Implementations and Applications of Machine Learning* (S. Subair and C. Thron, eds.) Springer, 2020.
- Thron, C, and Barry, J. "A Visualizable, Constructive Proof of the Fundamental Theorem of Algebra, and a Parallel Polynomial Root Estimation Algorithm". *International Journal of Mathematical Sciences and Optimization* 2020 (1), 757 -63.
<http://ijmso.unilag.edu.ng/article/view/1039/821>.
- Thron, C., & Hernandez, N. "Statistics Gone on Holiday: Misinterpretations of Hypothesis Tests Propagated by Internet Resources", *Journal of Social Sciences and Humanities*, Vol.5, No.3, Sep. 2019, Pub. Date: May 31, 2019.
<http://www.aiscience.org/journal/paperInfo/jssh?paperId=4472>
- O.J. Awolaye, T. Harris-Jackson, N. Hernandez, C. Thron, R. Olukolade, "Stress, Health, and Accident Risks for Commercial Drivers in Abuja, Nigeria: Causes and Correlations". *The Nigerian Health Journal* (2017) Vol. 17(2) 1-16.
<http://www.tnhjph.com/index.php/tnhj/issue/view/33>
- C. Thron, K. Tran, D. Smith, D. Benincasa, "Design and Simulation of Sensor Networks for Tracking Wifi Users in Outdoor Urban Environments". *Proc. SPIE 10206, Disruptive Technologies in Sensors and Sensor Systems* (June 28, 2017)
<https://www.spiedigitallibrary.org/conference-proceedings-of-spie/10206/102060L/Design-and-simulation-of-sensor-networks-for-tracking-Wifi-users/10.1117/12.2262545.short?SSO=1>
- A. Njoya, C. Thron, J. Barry, W. Abdou, T. Emmanuel, LN Konje, A. Dipanda, "An Efficient Scalable Sensor Node Placement Algorithm for Fixed Target Coverage Applications of Wireless Sensor Networks." *IET Wireless Sensor Systems* (2017) 2.
<https://ieeexplore.ieee.org/document/7885649>
- C. Thron, V. Miller, "Persistent Confusions about Hypothesis Testing in the Social Sciences,"

Social Sciences (2015) Vol. 4(2): 361-372. <https://www.mdpi.com/2076-0760/4/2/361/htm>

- C. Thron, *J. Watts*, “A Signal Processing Model of Quantum Mechanics,” African Review of Physics, vol. 8 (2013).
- C. Thron, *E. Jackson*, “Practicality of Agent-Based Modeling of Civil Violence: an Assessment,” IOSSBR Journal of Social Sciences Research, vol. 2 (2013).

BOOKS / BOOK CHAPTERS

- J. Hill*, C. Thron et al. “Elementary Abstract Algebra: Examples and Applications,” American Institute of Mathematics, 2017. (Online publication: <http://sl2x.aimath.org/book/aafmt/>)
- J. Barry*, C. Thron, “A Computational Physics-based Algorithm for Target Coverage Problems”, in “Advances in Nature-Inspired Computing and Applications” (S.K. Shandilya, S. Shandilya, A.K. Nagar, eds.), Springer (November 2018).
- C. Thron and *R. McCoy*, “Modeling and Simulation of Sectarian Tensions in Split Communities”, in Xu et. al. (Eds.). Social Computing, Behavioral–Cultural Modeling, and Prediction (9th International Conference Proceedings), Springer, 2016.

CONFERENCE PAPERS AND WORKSHOPS

- K. Tran* and C. Thron, “Fourier Subspace Preserving Particle Filter (poster paper)”, 22nd International Conference on Information Fusion (Fusion 2019), Ottawa Canada, July 2-5 2019.
- T. Laver* and C. Thron, Budget Prediction and Reconciliation through Dynamic Programming (poster), Military Operations Research Society Emerging Technologies Forum, Alexandria VA December 3-5 2018.
- J. Sossamon* and C. Thron, Medical Performance Monitoring Using a Log Likelihood Statistic (poster), Military Operations Research Society Emerging Technologies Forum, Alexandria VA December 3-5 2018.
- J. Sossamon* and C. Thron, Surgical Performance Monitoring Using an Maximum Likelihood Statistic, Texas Women In Mathematics Symposium, University of Houston, November 17-18 2018.
- K. Smith* and C. Thron, Market Focus and Excessive Social Drift: an Agent-Based Model (poster), Texas Women In Mathematics Symposium, University of Houston, November 17-18 2018.
- L. Brandt* and C. Thron, “Modeling Expenses and Liabilities in an Army Accounting System”, Mathfest 2017 (Mathematical Association of America), 28 July 2017, Chicago IL USA
- N. Hernandez* and C. Thron, “Type I Error: Conditional or Unconditional?”, Mathfest 2017 (Mathematical Association of America), 29 July 2017, Chicago IL USA.
- C. Thron, *K. Tran*, D. Smith, D. Benincasa, “Design and simulation of sensor networks for tracking Wifi users in outdoor urban environments”. SPIE Defense and Commercial Sensing, 9-13 April 2017, Anaheim CA USA.
- C. Thron and *R. McCoy*, “Modeling and Simulation of Sectarian Tensions in Split Communities”,

2016 International Conference on Social Computing, Behavioral-Cultural Modeling & Prediction and Behavior Representation in Modeling and Simulation (SBP-BRiMS), June 29-July 1, 2016.

H. Smith and C. Thron, “Indefinite integration via discrete Fourier transform, with epidemiological applications.” IBII International Conference on Mathematics and Applications (ICMA '16), April 28-30, 2016.

J. Barry and C. Thron, “A Physics-based Model for Target Coverage.” IBII International Conference on Mathematics and Applications (ICMA '16), April 28-30, 2016.

M. DeKock, E. Frederick, D. Seymore, C. Thron, J. Watts, “Use regular expressions in R to convert unstructured customer data to a standard format”, Texas Section, Mathematical Association of America, April 9-11 2015.

C. Thron, J. Hill, “Algebraic structures with applications: abstract algebra courseware for non-abstract thinkers,” AMS-MAA Joint Mathematics Meetings, San Antonio TX (January 10-13, 2015).

Chris Thron, Elizabeth Frederick, “Practicality of Agent-based Modeling of Civil Violence: an Assessment,” International Organization of Social Science and Behavioral Research (Biloxi MS October 2012).

Elizabeth Frederick, Chris Thron, “Patterns of Leftist, Rightist, and Cartel violence in Colombia 1989-1998,” International Organization of Social Science and Behavioral Research (Biloxi MS October 2012).

Chris Thron, Johnny Watts, “A Signal Processing Model of Quantum Mechanics,” Baylor University Department of Physics Colloquium, October 2012.

Justin Hill, Chris Thron “An Abstract Algebra Class for Secondary Mathematics Teachers,” Mathfest 2011 (Mathematical Association of America), Lexington, KY August 2011.

RESEARCH FELLOWSHIPS

Khoi Tran: Air Force Summer Faculty Fellowship, Air Force Research Laboratory, Rome NY (May-July 2020: extended Nov-Dec 2020. Uncertainty Propagation for Space Situational Awareness (Advisor: Joseph Raquepas).

K. Tran: Air Force Summer Faculty Fellowship, Air Force Research Laboratory, Rome NY (June-Aug 2016: extended October 2016) Design of wireless sensor networks for pedestrian location via WiFi signals (Principal Investigator: Douglas Smith).

E. Frederick: Air Force Summer Faculty Fellowship, Air Force Research Laboratory, Rome NY (May-Aug 2012) Agent-based behavior models of large-scale populations (Principal Investigator: John Salerno).

PREPRINTS

Thron, C., Tran, K., & Raquepas, J. (2020). High Performance Low Complexity Multitarget Tracking Filter for a Array of Non-directional Sensors. arXiv preprint arXiv:2009.08310.

Thron, Christopher, *Tran, Khoi* and Ali, Ahmed, A Low-Complexity, Low-Memory Frequent Itemset Mining Algorithm for Transactions With Sorted Items (June 2, 2019). Available at SSRN: <https://ssrn.com/abstract=3284587> or <http://dx.doi.org/10.2139/ssrn.3284587>