

Announces the Ph.D. Dissertation Defense of

Kavita

CONCERNING PERIOD OF PREPARATION
& QUALIFYING EXAMINATION

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Published Papers:

- K. Varma, D. A. Pados, E. S. Bentley, and M. J. Medley, "L₁-norm-error principal-component computation on feedforward neural network," *IEEE Trans. Neural Networks and Learning Systems*, submitted Mar. 2024.
- K. Varma and D. A. Pados, "The virtues of overfitting: Joint computation of minimum-L₁-norm-error principal components on convolutional neural network," *Thirty-eighth Annual Conf. on Neural Information Processing Systems (NeurIPS'24)*, Vancouver, BC, Canada, Dec. 9-15, 2024, submitted.
- M. S. Pour, E. Bou-Harb, K. Varma, N. Neshenko, D. A. Pados, and Kim-Kwang R. Choo, "Comprehending the IoT cyber threat landscape: A data dimensionality reduction technique to infer and characterize internet-scale IoT probing campaigns," *Digital Investigation (Elsevier)*, vol. 28, pp. S40-S49, Jan. 2019.
- K. Varma, L. Nyman, K. Tountas, G. Sklivanitis, A. Nayak, and D. A. Pados, "Autonomous plankton classification from reconstructed holographic imagery by L₁-PCA-assisted convolutional neural networks," in *Proc. MTS/IEEE OCEANS 2020*, (Biloxi, MS and Singapore) Virtual, Oct. 19-22, 2020, pp. 1-6.
- G. Gallone, K. Varma, D. A. Pados, and S. Colonnese, "Detection of change by L₁-norm Principal-Component Analysis," in *Proc. of SPIE, Defense + Commercial Sensing, Big Data II: Learning, Analytics, and Appl. Conf.*, (Anaheim, CA) Virtual, April 26-30, 2020, pp. 1-7.
- K. Varma, G. Sklivanitis, and D. A. Pados, "Training robust neural networks for autonomous plankton recognition," *64th Annual Conference on Great Lakes Research*, Michigan Tech University, Houghton, MI, May 17 - 21, 2021.