

## Publications for Philip Heng Wai Leong

### 2017

- Rahimi Azghadi, M., Linares-Barranco, B., Abbott, D., Leong, P. (2017). A Hybrid CMOS-memristor Neuromorphic Synapse. *IEEE Transactions on Biomedical Circuits and Systems*, 11(2), 434-445. <a href="http://dx.doi.org/10.1109/TBCAS.2016.2618351">[More Information]</a>
- He, Y., Peng, Y., Wang, S., Liu, D., Leong, P. (2017). A Structured Sparse Subspace Learning Algorithm for Anomaly Detection in UAV Flight Data [In Press]. *IEEE Transactions on Instrumentation and Measurement*.
- Pham, T., Nguyen, D., Dutkiewicz, E., McEwan, A., Leong, P. (2017). An anomaly detection technique in wearable wireless monitoring systems for studies of gait freezing in Parkinson's disease. *31st International Conference on Information Networking (ICOIN 2017)*, Piscataway: (IEEE) Institute of Electrical and Electronics Engineers. <a href="http://dx.doi.org/10.1109/ICOIN.2017.7899471">[More Information]</a>
- Dao, C., El Kass, A., Rahimi Azghadi, M., Jin, C., Scott, J., Leong, P. (2017). An enhanced MOSFET threshold voltage model for the 6i½300 K temperature range. *Microelectronics Reliability*, 69, 36-39. <a href="http://dx.doi.org/10.1016/j.microrel.2016.12.007">[More Information]</a>
- Pham, T., Leong, P., Robinson, P., Gutzler, T., Jee, A., King, G., Thamrin, C. (2017). Automated Quality Control of Forced Oscillation Measurements: Respiratory Artifact Detection with Advanced Feature Extraction. *Journal of Applied Physiology*, 123(4), 781-789. <a href="http://dx.doi.org/10.1152/jappphysiol.00726.2016">[More Information]</a>
- Umuroglu, Y., Fraser, N., Gambardella, G., Blott, M., Leong, P., Jahre, M., Vissers, K. (2017). FINN: A Framework for Fast, Scalable Binarized Neural Network Inference. *25th ACM/SIGDA International Symposium on Field-Programmable Gate Arrays (FPGAs)*, USA. <a href="http://dx.doi.org/10.1145/3020078.3021744">[More Information]</a>
- de Silva, A., Davis, R., Pasha, S., Leong, P. (2017). Forecasting Financial Time Series with Grammar-Guided Feature Generation. *Computational Intelligence*, 33(2), 241-261. <a href="http://dx.doi.org/10.1111/coin.12083">[More Information]</a>
- Fraser, N., Lee, J., Moss, D., Faraone, J., Tridgell, S., Jin, C., Leong, P. (2017). FPGA Implementation of a Fully Pipelined Kernel Normalised Least Mean Squares Processor [In Press]. *ACM Transactions on Reconfigurable Technology and Systems*.
- Pham, T., Moore, S., Lewis, S., Nguyem, D., Dutkiewicz, E., Fuglevand, A., McEwan, A., Leong, P. (2017). Freezing of gait detection in Parkinson's disease: A subject-independent detector using anomaly scores [In Press]. *IEEE Transactions on Biomedical Engineering*. <a href="http://dx.doi.org/10.1109/TBME.2017.2665438">[More Information]</a>
- Hua, J., Noorian, F., Moss, D., Leong, P., Gunaratne, G. (2017). High-dimensional time series prediction using kernel-based Koopman mode regression [In Press]. *Nonlinear Dynamics*. <a href="http://dx.doi.org/10.1007/s11071-017-3764-y">[More Information]</a>
- Dao, C., El Kass, A., Jin, C., Leong, P. (2017). Impact of series resistance on bulk CMOS current matching over the 5i½300 K temperature range. *IEEE Electron Device Letters*, 38(7), 847-850. <a href="http://dx.doi.org/10.1109/LED.2017.2709545">[More Information]</a>
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- Mahendra, A., Gill, D., Xiong, C., Orcutt, J., Lee, B., Huynh, T., Proesel, J., Dupuis, N., Leong, P., Eggleton, B., et al (2017). Monolithically integrated CMOS Nanophotonic segmented Mach Zehnder transmitter. *CLEO: Science and Innovations (CLEO\_SI 2017)*, Washington, DC: OSA - The Optical Society. <a href="http://dx.doi.org/10.1364/CLEO\_SI.2017.SM2O.4">[More Information]</a>
- Mahendra, A., Xiong, C., Zhang, X., Eggleton, B., Leong, P. (2017). Multiwavelength stabilization control of a thermo-optic system with adaptive reconfiguration. *Applied Optics*, 56(4), 1113-1118. <a href="http://dx.doi.org/10.1364/AO.56.001113">[More Information]</a>
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