## Dr. M. Arun

Associate Professor,
Department of Embedded Technology
School of Electronics Engineering - SENSE
VIT University, Vellore – 632 014, TN, India
aruninvlsi@gmail.com,
arunm@vit.ac.in,
Mob:+91 9942533393

VLSI Design, High-Performance Heterogeneous Computing, Information and Network Security

## **Journals**

- 1. Subam Mahajan, L. N. Sirisha Mrunalini and Arun M, "Dual Band Graphene Based Hexagonal Patch Antenna in Terahertz Regime for Biomedical Applications" Optik, Under Review, Sep 2020.
- 2. Surendar, A., Kavitha, M., Arun, M., Panwar, V., "Reliability Assessment of Solder Joints in Electronic Devices under Extreme Thermal Fluctuations", IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10(8), pp. 1394-1400.
- 3. Jabarullah, N.H., Surendar, A., Arun, M., Siddiqi, A.F., Krasnopevtseva, T., "Microstructural Characterization and Unified Reliability Assessment of Aged Solder Joints in a PV Module", IEEE Transactions on Components, Packaging and Manufacturing Technology, 2020, 10(6), pp. 1028-1034.
- 4. Siswanto, W.A., Arun, M., Krasnopevtseva, I.V., Surendar, A., Maseleno, A., "A competition between stress triaxiality and joule heating on microstructure evolution and degradation of SnAgCu solder joints", Journal of Manufacturing Processes, 2020, 54, pp. 221-227.
- 5. S.Saravanan, S.Sathish Kumar, M.Arun, Xiao ZhiGao, M.Nithyakumar, "Certain Study on Fabrication of Reversible Quantum Dot Photonic Integrated Circuit", Caribbean Journal of Science, ISSN: 0008-6452, Vol. 53, No. 2, 2019.
- 6. A Surendar, M Arun, AM Basha, "FFcPsA: a fast finite conventional state using prefix pattern gene search algorithm for large sequence identification", Soft Computing, Vol.23, No.8, pp.2761-2771, 2019.
- 7. Anish Chandran, Arun Manoharan, "Optimization of Tridiagonal Matrix Algorithm [TDMA] on Multicore Architectures: Computational framework and mathematical modelling", International Journal of Grid and High Performance Computing, Volume 11, Issue 4, Article 1, 2019 (140917-052547).
- 8. Rajkumar, S., Arun, M., Hirwani, J., Sanjeev, S.S., "Predictive analysis of crops cultivation for a smart green environment using azure services", International Journal of Recent Technology and Engineering, 2019, 7(5), pp. 295-298.

- 9. Jayanthi Chandrashekar and Arun Manoharan, "SAMR: Discovery of Short Distance and Secured Routing in MANET", Journal of Engineering and Applied Sciences, Vol.14, No.18, pp. 6675-6684, 2019.
- 10. Jayanthi Chandrashekar and Arun Manoharan, "An Identity Based Key Management Technique for Secure Routing in MANET", International Journal of Intelligent Engineering and Systems, Vol.11, No.06, pp.33-43, 2018.
- 11. L. N. Sirisha Mrunalini and Arun M , "Dual-Band Reconfigurable Graphene based Patch antenna in Terahertz band for WNoC Applications", IET Microwaves, Antennas Propagation, August 2017.
- 12. Bellamkonda Saidulu, Arun Manohran , "Energy efficient and low noise OTA with improved NEF for Neural Recording Applications", International Journal of Biomedical Engineering and Technology, Inderscience, 2017
- 13. Bellamkonda Saidulu, Arun Manoharan and Kumaravel Sundaram, "Low Noise Low Power CMOS Telescopic-OTA for Bio-Medical Applications", MDPI Computers, Vol.5, No.4, pp. 1-11, 2016.
- 14. Bellamkonda Saidulu and Arun Manoharan, "Design of Low Power Amplifier for Neural Recording Applications using Inversion Coefficient Methodology", International Journal of Control Theory and applications, No.10 (6), pp.719-727, 2017.
- 15. Bellamkonda Saidulu, Arun Manoharan, Bhavani B, "An improved CMOS voltage bandgap reference circuit", Advances in Intelligent Systems and Computing, Springer, 2017. (Accepted)
- 16. Bellamkonda Saidulu, Arun Manoharan, Bhavani B, "Power And Area Efficient TFET(20nm) Based Two Stage Opamp For Ultra Low Power Applications, Lecture Notes in Electrical Engineering, Springer, 2017 (Accepted).
- 17. Sureshkumar N, Arun, M., "A Genetic Based Feature Selection For Classification Of Landcover Changes Using Combination Of Lands", International Journal of Bio-Inspired Computation, Inderscience, 2017, 10(3), pp. 172-187.
- 18. Sureshkumar N, Arun, M., "Accuracy Analysis of Various Classification Algorithms for Used Land, Study Area Vellore, India", International journal of Enterprise Network Management, Inderscience, Vol.7 No.2, pp.113-132, 2016.
- 19. Sureshkumar N, Arun, M., "Remote Sensing Image Retrieval Using Object Based, Semantic, Classifier Techniques", International Journal of Information and Communication Technology, Inderscience, 13(1), pp. 68-82, 2018.
- 20. Sureshkumar N, Arun, M., "Mapping of Land Cover Changes in Vellore District by Using Remote Sensing Image", International Journal of Enterprise Network Management, Inderscience, Accepted, 2016.
- 21. Sureshkumar N, Arun, M., "Deforestation Identification Model Using Satellite Images by Colour Based Segmentation", International Journal of PharmTech Research, Vol.8, No.4, pp. 776-781, 2015.
- 22. Sureshkumar N, Arun, M., "Enhanced Classification Algorithms for the Satellite Image Processing, Indian Journal of Science and Technology, Vol.8, No.15, 2015.
- 23. Surendar, A., Arun, M., "Efficient DNA sequence analysis for reduced gene selection using frequency analysis", Journal of Chemical and Pharmaceutical Sciences 9(4), pp. 3367-3373, 2016.
- 24. Surendar, A., Arun, M., "FPGA based multi-level architecture for next generation DNA sequencing", Biomedical Research (India), 2016, pp. S75-S79.

- 25. Surendar, A., Arun, M., Basha, A.M., "Micro sequence identification of bioinformatics data using pattern mining techniques in FPGA hardware implementation", Asian Journal of Information Technology, 15(1), 2016, pp. 76-81.
- 26. M. Arun, A. Anudeep Kumar Reddy, V. Thulasiram, "Optimal Resource Allocation and Power Management for Mobile-To-Mobile Communication in Cellular Network", Indian Journal of Science and Technology, Vol.8, S1, pp. 235-241, 2015.
- 27. Rakesh Kumar Achar, M. Swagath Babu, M. Arun, "Border Gateway Protocol Performance and its Protection against Disturbed Denial of Service attack", Indian Journal of Science and Technology, Vol.8, S2, pp. 127-132, 2015.

## **Conference Proceedings**

- 1. Ghosh, J., Arun, M., "Adjustable Linear Actuator Based Power Seat for Occupational Disorders", 6th International Conference on Advanced Computing and Communication Systems, ICACCS 2020, 2020, pp. 811-815.
- 2. Patel, V., Arun, M., "Fault Management Strategy and PWM Monitoring for HVAC ECU", Proceedings of the 2nd International Conference on Electronics, Communication and Aerospace Technology, ICECA 2018, 2018, pp. 1736-1739.
- 3. Gulavani, P., Arun, M., "Automation Framework for Linux Audio", Proceedings of the 2nd International Conference on Electronics, Communication and Aerospace Technology, ICECA 2018, 2018, pp. 1010-1013.
- 4. Garg, N., Jain, A., Arun, M., "Implementation of Analytical Tool for Power Analysis in Multi Core Modem", Proceedings of the 2nd International Conference on Electronics, Communication and Aerospace Technology, ICECA 2018, 2018, pp. 1400-1403.
- 5. Shah, S., Manoj, P., Arun, M., "Module design for monitoring the health of CT Machine's Rotating frame", 2018 3rd IEEE International Conference on Recent Trends in Electronics, Information and Communication Technology, RTEICT 2018 Proceedings, 2018, pp. 445-449.
- 6. Bhanuteja, S., Shilpi, S., Pragna, K., Arun, M., "Smart security system for Indian rail wagons using IOT", IOP Conference Series: Materials Science and Engineering, 2017, 263(5).
- 7. Singh, S., Paul, A., Arun, M., "Parallelization of digit recognition system using Deep Convolutional Neural Network on CUDA", Proceedings of 2017 3rd IEEE International Conference on Sensing, Signal Processing and Security, ICSSS 2017, 2017, pp. 379-383.
- 8. L. N. Sirisha Mrunalini, M. Arun, "Novel dual polarized graphene based antenna for wireless communications in THz band", 2016 3rd IEEE International Conference on Emerging Electronics (ICEE), Mumbai, India.
- 9. Uditi, Arun M. "Comparative analysis of parallelised shortest path algorithms using Open MP", 2017 Third IEEE International Conference on Sensing, Signal Processing and Security (ICSSS), Chennai, India. DOI: 10.1109/SSPS.2017.8071622
- 10. Chare, A., Dhakate, K., Joshi, N., Arun, M., Hariharasudhan, V., "Easy connect(eC)", Proceedings International Conference on Trends in Electronics and Informatics, ICEI 2017, 2018-January, pp. 1169-1174.
- 11. Bhanuteja, S., Shilpi, S., Pragna, K., Arun, M., "Smart security system for Indian rail wagons using IoT" IOP Conference Series: Materials Science and Engineering, 2017, 263(5), 052024.

- 12. Srishti Singh, Amrit Paul, M. Arun, "Parallelization of digit recognition system using Deep Convolutional Neural Network on CUDA" 2017 Third IEEE International Conference on Sensing, Signal Processing and Security (ICSSS), Chennai, India. DOI: 10.1109/SSPS.2017.8071623
- 13. Navada, S., Arun, M., Balasubramanian, S., "Bare-metal agent architecture for target communication framework", Proceedings International Conference on Trends in Electronics and Informatics, ICEI 2017, pp. 1100-1105.