

FACULTY PROFILE



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Experience : 6 years

Research area : FPGA design, VLSI Design, Deep Learning, Signal Processing, Image Processing

Recent Publications: (last five years)

- 1) PraveenkumarBabu and EswaranParthasarathy, “Hardware Acceleration for object detection using YOLOv4 algorithm on Xilinx Zynq platform,” Journal of real-time image processing. 2022. (SCIE, IF: 2.293).
- 2) PraveenkumarBabu and EswaranParthasarathy, “FPGA Implementation of Multi-dimensional Kalman filter for Object Tracking and Motion Detection,” Engineering Science and Technology (Elsevier), vol. 33, 2022. (SCIE, IF: 5.155)
- 3) PraveenkumarBabu and EswaranParthasarathy, “Hardware/Software Acceleration of Image and Video Processing on Xilinx Zynq Platform,” Intelligent Automation and Soft Computing, vol. 30(3), pp. 1063-1071, 2021. (SCIE, IF: 3.401).
- 4) PraveenkumarBabu and EswaranParthasarathy, “Reconfigurable FPGA Architectures: A Survey and Applications,” Journal of the Institution of Engineers India, (Series B) (Springer) 102, 143–156 (2020). <https://doi.org/10.1007/s40031-020-00508-y>. (Scopus, SNIP: 0.468)
- 5) PraveenkumarBabu and EswaranParthasarathy, “Performance evaluation of MDKF based on state estimations for path tracking applications,” J. Phys.: Conf. Ser., vol 2335, 2022. (Scopus, SNIP: 0.395)

- 6) PraveenkumarBabu and EswaranParthasarathy, “Optimized Object Detection Method for FPGA Implementation,” 2021 Sixth International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET), IEEE, 2021, pp. 72-74, DOI: <https://doi.org/10.1109/WiSPNET51692.2021.9419407>
- 7) PraveenkumarBabu and EswaranParthasarathy, “Implementation of Augmented Reality using Reconfigurable Hardware,” in Proc. of 1st International Conference on Electronics, Photonics and Smart Technologies (ICePhaST-2020), vol. 1, 2020.
- 8) PraveenkumarBabu and EswaranParthasarathy, “Reconfigurable Computing: Where It Has Been and Where It Will Be,” Annual Technical Volume, Institution of Engineers (India), 2021.

Other Recognitions:

- 1) Reviewer in Journal of Real-Time Image Processing (Springer), Security and Communication Networks, Journal of Interconnection Networks, International Journal of Pervasive Computing and Communications (IJPCC) and Computer Assisted Methods in Engineering and Science (CAMES).