

FACULTY PROFILE



Name : Mr. B. Praveenkumar, M.E., (Ph.D)

Designation : Assistant Professor - III (S.G), Department of ECE,
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Experience : 4.6 in years

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

Recent Publications: (last five years)

- 1) Praveenkumar Babu and Eswaran Parthasarathy, "FPGA Implementation of Multi-dimensional Kalman filter for Object Tracking and Motion Detection," *Engineering Science and Technology (Elsevier)*, vol. 33, 2022. **(SCIE, IF: 4.360)**
- 2) Praveenkumar Babu, Saravanan. M, Selvi C, Eswaran Parthasarathy, "Efficient multi-robot exploration on Xilinx Zynq SoC for industrial applications," *in Proc. of 4th International Conference on Advances in Mechanical Engineering (ICAME 2022)*, March 24-26, 2022. **(Scopus Indexed, Article in-press)**
- 3) Praveenkumar Babu and Eswaran Parthasarathy, "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: 1.647).**
- 4) Praveenkumar Babu and Eswaran Parthasarathy, "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>. **(SNIP: 0.352)**
- 5) Praveenkumar Babu and Eswaran Parthasarathy, "Optimized Object Detection Method for FPGA Implementation," *2021 Sixth International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET)*, IEEE, 2021, pp. 72-74, [10.1109/WiSPNET51692.2021.9419407](https://doi.org/10.1109/WiSPNET51692.2021.9419407).

- 6) Praveenkumar Babu and Eswaran Parthasarathy, "Implementation of Augmented Reality using Reconfigurable Hardware," in *Proc. of 1st International Conference on Electronics, Photonics and Smart Technologies (ICePhaST-2020)*, vol. 1, 2020.
- 7) Praveenkumar Babu and Eswaran Parthasarathy, "Reconfigurable Computing: Where It Has Been and Where It Will Be," Annual Technical Volume, IE(I), pp. 110-116, 2020.

Other Recognitions:

- 1) Reviewer in Journal of Interconnection Networks, International Journal of Pervasive Computing and Communications and Computer Assisted Methods in Engineering and Science (CAMES).