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Designation : Assistant Professor

Department : Department of Computer Science and Engineering
(JOINED THE INSTITUTE IN 2022)

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RESEARCH INTERESTS

VLSI Physical Design:

- ✓ Reduce area, wirelength, dead-space, cputime by optimally placing blocks.
- ✓ Maximize white space allocation and minimize block overlapping.
- ✓ Reduce routing congestion
- ✓ Develop a wire-length model for analytical placement.

Academic Qualifications

Ph.D. (Cont.), Computer Science, Utkal University, Bhubaneswar, India

M.Tech. (Computer Science and Engineering) CET, Bhubaneswar, India

B.Tech. (Computer Science and Engineering) GHITM, Puri, India

Teaching Experience/Industrial Experience/Research Experience

- ✓ 17 Years

PUBLICATIONS

JOURNAL & CONFERENCES

- [1]. A. K. Samal, A. K. Parida, S. K. Pani and **A. K. Dash**, "A novel fault-tolerant scheduling of real-time tasks on multiprocessor using discrete-elitist multi-ACO," 2015 International Conference on Communications and Signal Processing (ICCSP), 2015, pp. 1939-1945, doi: 10.1109/ICCSP.2015.7322865.

- [2]. A. K. Samal, **A. K. Dash**, P. C. Jena, S. K. Pani and S. Sha, "Bio-inspired approach to fault-tolerant scheduling of real-time tasks on multiprocessor - a study," 2015 IEEE Power, Communication and Information Technology Conference (PCITC), 2015, pp. 905-911, doi:10.1109/PCITC.2015.7438125.
- [3]. S. Samanta Singhar, B. N. B. Ray, **A. K. Dash** and A. Malla, "Optimizing Mixed Size & Large Scale Block Placement Using Greedy Approach," 2019 International Conference on Information Technology (ICIT), 2019, pp. 442-447, doi: 10.1109/ICIT48102.2019.00084.
- [4]. **A. K. Dash** and B. N. B. Ray, "2D Greedy Algorithm for overlap removal for Mixed-Size Placement in VLSI," 2021 19th OITS International Conference on Information Technology (OCIT), 2021, pp. 26-31, doi: 10.1109/OCIT53463.2021.00017.

PATENT

- [1] Patent Title : **Neural-Network Based Method for Data Partitioning and Parameter Learning Using Fuzzy Term Identification**
Patentee Names: Pramod Patro, Krishna Kumar, G. Suresh Kumar, Gandharba Swain, Trilochan Rout, Manas Ranjan Chowdhury, Dakshya Prasad Pati, **Akshaya Kumar Dash**, Aditya Kumar Sahu
Patent Application Number: 202041029533
Date of Publication: 31-07-2020
- [2] Patent Title: **System For issue alert of security breach using machine learning and fuzzy logic**
Patentee Names:Pramoda Patro , Dakshya Prasad Pati, Sanjaya Kumar Sarangi, **Akshaya Kumar Dash**, Manas Ranjan Chowdhury, Satya Bhusha Verma, Hanumantha Rao Sama, Trilochan Rout, Umakanta Mishra, Aditya Kumar Sahu
Patent Application Number:2021100314
Date of Publication:29-04.2021
- [3] Patent Title: **Method of Coastal Communication and Response System during Tropical Cyclone using Mobile Ad-hoc Network**
Patentee Names: Snehalata Agasty, Manas Ranjan Chowdhury, **Akshaya Kumar Dash**, Rasmita Lenka, Arabinda Nanda, Mrutyunjaya Panda, Dakshya Prasad Pati, Sanjaya Kumar Sarangi
Patent Application Number: 2021104117
Date of Publication:14-07-2021
- [4] Patent Title: **Machine learning-based breast cancer detection system using a near-field microwave antenna sensor**
Patentee Names: Manas Ranjan Chowdhury, **Akshaya Kumar Dash**, Harikishore, Rayapoodi, Kakulapati Murali Krishna, Krishna Kumar, Pramoda Patro, Satyabrata Patro, Hanumantha Rao Sama, Alina Sasmal, Debabrata Swain.
Patent Application Number: 202022101928.2
Date of Publication:11-08-2022

ANY OTHER

Book Chapter
Conferences attended