

Buddhadeb Pradhan

PERSONAL DETAILS

Address 1 Santoshpur Govt. Colony, Block-B, Santoshpur, Kolkata - 700142(Present)

Address 2 Purusttompur, Asda, Paschim Medinipur, 721445(Permanent)

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Father Banka Bihari Pradhan

Birth April 3, 1988

PROFESSIONAL PREPARATION

Doctor of Philosophy(Engineering)

2014-2020

Institute: National Institute of Technology Durgapur

Thesis Title : Coordinated Navigation of Multiple Mobile Robots

Degree Awarded Date: 31.01.2020

Master of Technology(Computer Science and Engineering)

2009-2011

University: Biju Patnaik University of Technology Institute: National Institute of Science and Technology

CGPA: 9.03

Thesis Title: Grid Computing based Power Systems Extreme Event Screening: A

Graph Theoritic Approach

Bachelor of Technology(Computer Science and Engineering)

2005-2009

University: West Bengal University of Technology

Institute: Calcutta Institute of Technology

CGPA: 8.08

Project Title: Searching an Unique Path Between a Source and Destination in MANET

XII 2005

West Bengal Council of Higher Secondary Education

Percentage: 75.6

 \mathbf{X} 2003

West Bengal Board of Secondary Education

Percentage: 86.13

WORK EXPERIENCE

Temporary Faculty

Feb 2020- June

2020

National Institute of Technology Jamshedpur

Academic and administrative responsibilities as well as guiding PG students for their project work

Assistant Professor

Budge Budge Institute of Technology, Kolkata

Academic and administrative responsibilities as well as guiding students for their project work

SKILLS

Languages Bengali (Mother Tongue)

English (fluent) Hindi (fluent)

software MATLAB, ECLIPSE, GRIDSIM, PHPMYADMIN

Programming C, C++, JAVA, HTML, JAVASCRIPT, PHP, PYHTON

Research
Interest
ROBOTICS, SOFT COMPUTING, BIG DATA, MACHINE LEARNING

Interest

PUBLICATIONS

Journals

- K. H. K. Reddy, A. Kr. Luhach, **B. Pradhan**, J. K. Dash, D. S. Roy, A genetic algorithm for energy efficient fog layer resource management in context-aware smart cities, *Sustainable Cities and Society*, 2020,102428, ISSN 2210-6707. (IF:5.268)SCI
- M.W. Hussain, B. Pradhan, X.Z. Gao, K.H.K. Reddy, D.S. Roy, Clonal selection algorithm for energy minimization in software defined networks, *Applied Soft Computing*, Volume 96, 2020, 106617, ISSN 1568-4946. (IF:5.472)SCI
- B. Pradhan, V. Vijayakumar, S. Pratihar, D. Kumar, K. H. K. Reddy, D. S. Roy, A genetic algorithm based energy efficient group paging approach for IoT over 5G, Journal of Systems Architecture, 2020, 101878, ISSN 1383-7621. IF:2.552)SCI
- B. Pradhan, A. Nandi, N. B. Hui, D. S. Roy and J. J. P. C. Rodrigues, "A Novel Hybrid Neural Network-Based Multirobot Path Planning With Motion Coordination," in *IEEE Transactions on Vehicular Technology*, vol. 69, no. 2, pp. 1319-1327, Feb. 2020. doi: 10.1109/TVT.2019.2958197 (IF:5.339)SCI
- Pradhan, Buddhadeb ,Vijayakumar, V , Hui, Nirmal , Sinha Roy, Diptendu. (2019). Intelligent navigation of multiple coordinated robots. *Journal of Intelligent & Fuzzy Systems*, vol. 36, no. 5, pp 4413-4423. doi: 10.3233/JIFS-169996 (IF:1.637)SCIE.
- B. Pradhan, D. Sinha Roy and N.B. Hui, Motion planning and coordination of multi-agent systems, *International Journal of Computational Vision and Robotics*, vol. 8, no. 5, pp.492–508, 2018 **Scopus**.
- Pradhan, B., Nayak, A. (2011). An Elegant Load Balancing Scheme in Grid Computing Using Grid Gain. International Journal of Computer Science and Its Application, Vol. 1 Issue 1, pp. 254-257.
- B. Pradhan, A. Nandi, N. B. Hui, D. S. Roy, G. Srivastava, A Game Theoretic Group Coordination Strategy for Multi Robot Navigation (Accepted at Intelligent Service Robotics)(Springer)(IF:1.547)SCI

Conferences

- Pradhan B., Hui N.B., Roy D.S. (2020) Heuristic Coordination for Multi-agent Motion Planning. In: Khanna A., Gupta D., Bhattacharyya S., Snasel V., Platos J., Hassanien A. (eds) International Conference on Innovative Computing and Communications. Advances in Intelligent Systems and Computing, vol 1087. Springer, Singapore
- B. Pradhan, D. Sinha Roy, N. B. Hui, "Multi-Agent Navigation and Coordination using GA-Fuzzy Approach", Advances in Intelligent Systems and Computing, vol. 817, pp. 793-805, 2019.
- K.Hemant K. Reddy, Manas Ranjan Patra, Diptendu Sinha Roy, **B Pradhan**, "An Adaptive Scheduling Mechanism for Computational Desktop Grid Using GridGain, Procedia Technology, Volume 4, 2012, pp. 573-578.
- Pradhan B., Shial R.K., Sinha Roy D. (2012) Grid Computing Based NIC Infrastructure: A Step towards IT Enabled India, INDIA 2012, Visakhapatnam, India. Advances in Intelligent and Soft Computing, vol 132. Springer, Berlin, Heidelberg
- B. Pradhan, K. Hemant Reddy, D. S. Roy and D. K. Mohanta, "Intentional islanding of electric power systems in a grid computing framework: A graph-theoretic approach," 2011 International Conference on Recent Trends in Information Systems, Kolkata, 2011, pp. 156-160.
- B. Pradhan, S. S. Paik, D. S. Roy and D. K. Mohanta, "A sustainable protection scheme for the Indian power system using grid computing: A graph-theoretic approach," 2011 Annual IEEE India Conference, Hyderabad, 2011, pp. 1-6.
- Buddhadeb Pradhan, Ajay Nayak, "Harnessing the potential of Grid Computing using Grid Gain" in Proceedings of National Conference on Next Generation Communication and Computing, 2010, NMIET, Bhubaneswar.
- B. Pradhan, N.B. Hui, "Strategic Coordination and Navigation of Multiple Wheeled Robots" (Accepted at iNaCoMM2019)

AWARDS AND RESEARCH DISTINCTIONS

- Editorial Board Member of Journal of Computer Science Research
- Reviewer of Journal of Intelligent and Fuzzy Systems (IOS Press)
- Reviewer of IEEE Transactions on Mechatronics
- Programme Committee Member of International Conference on Big Data and Cloud Computing (ICBCC 2019)
- Programme Committee Member and reviewer of International Conference on Emerging Technologies in Data Mining and Information Security (IEMIS 2018)
- Life Member of International Association of Engineers (IAENG)
- Member of American Society of Mechanical Engineers (ASME)
- Member of Institute of Electrical and Electronics Engineers (IEEE)
- Professional Member of Association for Computing Machinery (ACM)
- Member of Special Interest Group on Data Communications (SIGCOMM-ACM)

- Life Member of The Robotics Society (TROS)
- GATE Qualified at 2009 having 87.25 Percentile
- Best Paper Award received at SocProS 2017 held at IIT Bhubaneswar

REFERENCES

- Dr.Nirmal Baran Hui, Professor, Department of Mechanical Engineering, National Institute of Technology Durgapur, Email: nirmal.hui@me.nitdgp.ac.in
- Dr. Diptendu Sinha Roy, Associate Professor, Department of Computer Science and Engineering, National Institute of Technology Meghalaya, Email: diptendu.sr@nitm.ac.in
- Prof. Xiao-Zhi Gao, Professor, School of Computing, Kuopio Campus, University of Eastern Finland, Email: xiao-zhi.gao@uef.fi