Rakesh Kumar Sanodiya

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EDUCATION

2016–2019 : *Doctorate of Philosophy (Ph.D.): Computer Science and Engineering, Indian Institute of Technology Patna, Patna, Bihar*	*Course work with CGPA 8.3*
2012–2014: *Master of Technology (M.Tech.): Computer Technology and Application, SoIT , RGPV University, Bhopal MP*	*Completed with CPGA 8.43*
2007–2011: *Bachelor of Engineering (B.E.): Computer Science and Engineering, NIIST, RGPV University, Bhopal MP*	*Completed with an aggregate 75.31%.*

RESEARCH INTERESTS

- *Image Processing*
- *Computer Vision*
- *Pattern Recognition*
- *Machine Learning*
- *Internet of Things*

RESEARCH EXPERIENCE

Ph.D. in Computer Science and Engineering
From 4 Jan 2016 to 19 Nov 2019, Indian Institute of Technology, Patna, Bihar, India.
Supervisor: Dr. Jimson Mathew
Thesis title: **"Explorations in Metric Learning with Applications to clustering and classification"**

PUBLICATIONS

Journal Articles:

1. **R. K. Sanodiya**, S. Saha, and J. Mathew (**2019**): A Kernel Semi-supervised Distance Metric Learning with Relative Distance: Integration with a MOO Approach, In Expert Systems With Applications (**Impact Factor: 4.29**). DOI: https://doi.org/10.1016/j.eswa.2018.12.051

2. **R. K. Sanodiya** and J. Mathew (**2019**): A framework for semi-supervised metric transfer learning on Manifolds, In Knowledge Based System (**Impact Factor: 5.10**). DOI: https://doi.org/10.1016/j.knosys.2019.03.021

3. **R. K. Sanodiya**, J. Mathew, S. Saha, and M. D. Thalakottur (**2019**): A New Transfer Learning Algorithm in Semi-supervised Setting, In IEEE Access Journal (**Impact Factor: 4.09**). DOI: 10.1109/ACCESS.2019.2907571

4. **R. K. Sanodiya**, S. Saha, and J. Mathew (**2019**): Semi-supervised orthogonal discriminant analysis with relative distance : Integration with a MOO approach, Soft Computing (**Impact Factor: 2.78**). DOI: https://doi.org/10.1007/s00500-019-03990-9

5. **R. K. Sanodiya** and J. Mathew (2019): A Novel Unsupervised Globality-Locality Preserving Projections in Transfer Learning, In Image and Vision Computing (**Impact Factor: 2.74**). DOI: https://doi.org/10.1016/j.imavis.2019.08.006

6. **R. K. Sanodiya**, J. Mathew, B. Paul, and B. A. Jose (2019): A Kernelized Unified Framework for Domain Adaptation, In IEEE Access Journal (**Impact Factor: 4.09**) DOI:10.1109/ACCESS.2019.2958736

International Conference Proceeding:

1. **R. K. Sanodiya**, S. Saha , and J. Mathew (**2018**): A Multi-Kernel Semi-Supervised Metric Learning using Multi-objective Optimization Approach, In the proceedings of 25th International Conference on Neural Information Processing (ICONIP 2018) (**Core ranking: A**).

2. **R. K. Sanodiya**, S. Saha , J. Mathew, and P. Bangwal (**2018**): Semi-Supervised Transfer Metric Learning with Relative Constraints, In the proceedings of 25th International Conference on Neural Information Processing (ICONIP 2018) (**Core ranking: A**).

3. **R. K. Sanodiya**, S. Saha , J. Mathew, and A. Raj (**2018**): Supervised and Semi-Supervised Multi-Task Binary Classification, In the proceedings of 25th International Conference on Neural Information Processing (ICONIP 2018) (**Core ranking: A**).

4. **R. K. Sanodiya**, S. Saha , J. Mathew, M. D. Thalakottur, and U. Aadya (**2019**): Semi-Supervised Discriminant Analysis with Relative Distance: Integration with a MOO Approach, In the proceedings of IEEE Congress on Evolutionary Computation (CEC-2019) (**h-Index: 66**).

5. **R. K. Sanodiya**, C. Sharma, and J. Mathew (**2019**): Unified Framework for Visual Domain Adaptation Using Globality-Locality Preserving Projections, In the proceedings of 26th International Conference on Neural Information Processing (ICONIP 2019) (**Core ranking: A**).

6. **R. K. Sanodiya**,J. Mathew, M. D. Thalakottur, and M. Khushi (**2019**): Semi-supervised Regularized Coplanar Discriminant Analysis, In the proceedings of 26th International Conference on Neural Information Processing (ICONIP 2019) (**Core ranking: A**).

Communicated Journal Articles:

1. **R. K. Sanodiya**, J. Mathew, R. Aditya, A. Jacob, and B. Nayanar (**2019**): Kernelized Unified Domain Adaptation on Geometrical Manifolds, In Expert Systems With Applications (**Impact Factor: 4.29).**

2. **R. K. Sanodiya**, J. Mathew, S. Saha, and M. Khusi (**2019**): A Unified Framework for Semi-Supervised Metric Transfer Learning based on Difference of Convex Functions Programming, In Machine Vision and Application (**Impact Factor: 1.78**).

3. **R. K. Sanodiya**, J. Mathew, S. Saha, and P. Tripathy (**2019**): A Particle Swarm Optimization based Parameter Selection to Unsupervised Discriminant Analysis in Transfer Learning, In Applied Intelligence (**Impact Factor: 2.88**).

4. **R. K. Sanodiya**, A. Mathew, and J. Mathew (**2019**): A Unified Framework for Unsupervised Deep Domain Adaptation, In Applied Soft Computing (**Impact Factor: 4.88**).

5. **R. K. Sanodiya** and J. Mathew (**2019**): Visual Domain Adaptation Based on Joint Geometric and Statistical Alignment Using Distance Metric Learning, ACM Transactions on Knowledge Discovery from Data (TKDD) (**Impact Factor: 2.39**).

6. **R. K. Sanodiya,** S. Saha, and J. Mathew (**2019**): A Particle Swarm Optimization based Feature Selection to Unsupervised Discriminant Analysis in Transfer Learning, In Soft Computing (**Impact Factor: 2.7**).

7. **R. K. Sanodiya** and J. Mathew (**2019**): Regularized framework in domain adaptation (RF-DA, In Pattern Recognition Letters (**Impact Factor: 2.81**).

TEACHING EXPERIENCE

From January 2015 – December 2015
Designation : Assistant Professor
Organization: Radharaman Engineering College, Bhopal , MP,India

From July 2014 – December 2014
Designation : Lecturer
Organization: Govt. Polytechnic College Barwani, MP, India

SKILLS SET

- *Languages: C, C++, Java, Python*
- *Typesetting: LATEX, Microsoft One*
- *Tools and Library: MATLAB, Tensorflow, Android Studio (Mobile Application)*

TECHNICAL INTEREST

- *UGC-JRF- NET Qualified (**Dec-2015, June-2015, Dec-2014, June-2014**)*
- *Gate Qualified (**2017 (369-Score), 2016 (485-Score), 2015 (497 -Score), 2014 (379 -Score), 2013 (384 Score), 2012 (Score 420)**)*

EXTRA-CURRICULAR ACTIVITIES

- *OpenGovDataHack National Award (**2nd Runners Up**)*
- *International IoT Grant Challenge (**Won Second Prize**)*
- *Smart India Hackathon (**Won First Prize**)*
- *Intel @ Higher Education Challenge (**Won First Prize**)*

PROFESSIONAL REFEREES

Dr. Jimson Mathew

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IIT Patna, Patna - 801103, Bihar, India.

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Dr. Matloob Khushi

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Dr. Samrat Mandol

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