

## Dr. Jayadeep Pati



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**Assistant Professor,**  
**Indian Institute of Information Technology Ranchi**  
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## Areas Of Interest

- Applied Machine Learning
- Software Engineering
- Data Science
- Bio Informatics
- Time Series Analysis

## Professional Background

From	To	Designation	Organisation
05 Dec 2018	Ongoing	Assistant Professor	IIT Ranchi
1st Jan 2018	30-Nov-2018	Assistant Professor	IIT Pune
Sep 2012	Aug 2017	Research Fellow (PhD)	IIT (BHU)
July 2010	Jun 2012	Research Fellow (M.Tech)	NIT Rourkela

## Scholarship And Awards

Award	Program	Year
Awarded for Being a Jury Member	Smart India Hackathon-2019	2019
Scholarship	Institute	Year
MHRD Research Fellowship (PhD)	IIT (BHU)	2012-2017
MHRD Research Fellowship (GATE)	NIT Rourkela	2010-2012

## Educational Details

Degree	Subject	University	Year
Ph. D.	Computer Science and Engineering	IIT (BHU)	2017
M. Tech.	Computer Science and Engineering	NIT Rourkela	2012
B. Tech	Computer Science and Engineering	BPUT - ODISHA	2010

## Administrative Background

From	To	Designation	Organisation
Jan-2019	Ongoing	Faculty In Charge, Training and Placement Office, IIIT Ranchi	IIIT Ranchi
Jan-2019	Ongoing	Faculty In Charge, Web Management Cell, IIIT Ranchi	IIIT Ranchi
Jan-2019	Ongoing	Faculty Advisor (1 <sup>st</sup> Year –CSE)	IIIT Ranchi

## Participation In Conferences / Seminars

Authors;Title;Vol;No;Pages	Place	Sponsored By	Date
Pati, J.,Kapoor, S., Anand, A., Shukla, K.K, A Hybrid Modeling Approach for Software Clone Evolution Prediction,Proceedings of EECS-2015, Hong Kong.	Hong Kong	IIT (BHU)	16 Dec 2015
Pati, J., Shukla, K.K., A nonlinear ARIMA technique for Debian bug number prediction, Volume4 issue4 of International Journal of Artificial Intelligence and Neural Networks,Proc. of the Intl. Conf. on Advances In Computer and Electronics Technology-ACET 2014	City University of Hong Kong	IIT (BHU)	26 Sep 2014
Pati, J.,Swarnkar, K., Dhakad, G., Shukla, K.K,Temporal Modelling of Bug Numbers of Open Source Software Applications Using LSTM, Advances in Intelligent Systems and Computing series,Volume 683	Manipal Deemed University	IIT (BHU)	13 Sep 2017
Pati, J., Shukla, K.K., A hybrid technique for software reliability prediction, ACM International Conference Proceeding Series, pp.	Bengaluru	IIT (BHU)	26 Aug 2014

139-146			
Pati, J., Shukla, K.K., Time series prediction of debian bug data using autoregressive neural network, Proceedings - 4th IEEE International Conference on Computer and Communication Technology, ICCCT 2013 6749612, pp. 110-115	<b>MNNIT Allahbad</b>	IIT (BHU)	23 Sep 2013
Pati, J., Shukla, K.K., A Neural Network Approach to Debian Bug Number Prediction, Computer Application and Signal Processing 2014	<b>Mumbai</b>	IIT (BHU)	22 Aug 2014
Pati, J., Shukla, K.K., A comparison of ARIMA, neural network and a hybrid technique for Debian bug number prediction, Article number 7001468, Pages 47-53	<b>MNNIT Allahbad</b>	IIT (BHU)	28 Sep 2014
Yeresime, S., Pati, J., Rath, S.K., Advances in Intelligent Systems and Computing 216, Volume 216, 2014, Pages 267-27	<b>Chennai</b>	NA	12 Feb 2012

#### Seminars/Short Term Courses/Summer Schools/Winter school attended

<b>Name of the Course</b>	<b>Institute Organization</b>	<b>From</b>	<b>To</b>
Nationa Workshop on Software Engineering Applications for Computer Network (SEACN -2011)	NIT Rourkela	08-12-2011	11-12-2011
Recent Trends in Object Oriented Software Testing (RTOOST – 2011)	NIT Rourkela	23-05-2011	25-05-2011
ISBA Regional Meeting and International Conference / Workshop on Bayesian Theory and Application	DST- CIMS BHU	06-01-2013	10-01-2013

Regional Symposium on Natural Language Processing	IIT (BHU)	21-03-2015	22-03-2015
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#### Projects And Thesis Supervised

Title of Project	Project Status
IT Application in Agriculture	Project Proposal To Be Submitted

#### Research Scholar Groups

Scholar Name	Interest
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#### Member Professional Bodies

Name of Professional Body	Membership Status
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#### Visits To Outside Institutions

Institute Visited	Purpose of Visit	Date
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#### Courses Or Conferences Organised

Conference Name	Sponsored By	Date
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#### National International Collaboration

Topic	Organisation
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#### List of Publications

#### Journal Publication

1. Pati, J., Kumar, B., Manjhi, D., Shukla, K. K. (2017). A COMPARISON AMONG ARIMA, BP-NN AND MOGA-NN FOR SOFTWARE CLONE EVOLUTION PREDICTION. IEEE Access. (SCI – IF 3.557)  
DOI: 10.1109/ACCESS.2017.2707539
2. Pati, J., (2018) Gene Expression Analysis for Early Lung Cancer Prediction using Machine Learning Techniques: An Eco-Genomics Approach" , IEEE Access. (Accepted) (SCI – IF 3.557)  
DOI:NA
3. Pati, J., Kumar, B., Manjhi, D., Shukla, K. K. (2017). Machine Learning Strategies for Temporal Analysis of Software Clone Evolution using Software Metrics. International Journal of Applied Engineering Research, 12(11), 2798-2806. (Scopus)  
DOI: NA

4. Pati, J.,K. K. (2017). Analysis of Temporal Bug Patterns in Open Source Software Using Hidden Markov Model International Journal of Software Engineering and Its Applications Vol. 11, No. 4 (2017), pp. 11-24. (Scopus: 2011 - 2016)  
**DOI: 10.14257/ijseia.2017.11.4.02**
5. Pati, J.,K. K. (2014). A nonlinear ARIMA technique for Debian bug number prediction, Volume4 issue4 of International Journal of Artificial Intelligence and Neural Networks, IRED, USA.  
**DOI: 10.15224/ 978-1-63248-024-8-14**
6. Suresh, Y., Pati, J., Rath, S. K., (2012). Effectiveness of software metrics for object-oriented system. Procedia Technology 6 (2012) 420 – 427.  
**DOI: 10.1016/j.protcy.2012.10.050**

## Conference Publication

1. Pati, J., Shukla K. K. (2015). A Hybrid Technique for Software Reliability Prediction, Proceedings of the 8th India Software Engineering Conference. ACM, 2015.  
**DOI: 10.1145/2723742.2723756**
2. Pati, J., Shukla K. K. (2014). A comparison of ARIMA, neural network and a hybrid technique for Debian bug number prediction. Computer and Communication Technology (ICCCT), 2014 International Conference on. IEEE, 2014.  
**DOI: 10.1109/ICCCT.2014.7001468**
3. Pati, J., Shukla K. K. (2014). A Neural Network Approach to Debian Bug Number Prediction 4th International Conference on Computational Intelligence and Information Technology – CIIT 2014, Computer Application and Signal Processing 2014.  
**DOI: 10.3850/9789810925796\_ P004**
4. Suresh, Y., Pati, J., Rath, S. K., (2012)  
Review of Software Quality Metrics for Object Oriented Methodology  
DOI:NA
5. Pati, J., Shukla et al. (2017). Temporal Modelling of Bug Numbers of Open Source Software Applications Using LSTM. Accepted Advances in Intelligent Systems and Computing – Springer (Scopus)  
**DOI: 10.1007/978-3-319-68385-0\_16.**
6. Pati, J., Shukla K. K. (2013). Time series prediction of Debian bug data using autoregressive neural network. Computer and Communication Technology (ICCCT), 2013 International Conference on. IEEE, 2013.  
**DOI: 10.1109/ICCCT.2013.6749612**

## Conference Publication (Presented Abroad):

1. Pati, J., Shukla K. K. (2014). A Nonlinear ARIMA Technique for Debian Bug Number Prediction, Proc. of the Intl. Conf. on Advances in Computer and Electronics Technology- ACET 2014. City University of Hong Kong. ISBN: 978-1-63248-024-8  
DOI: 10.15224/ 978-1-63248-024-8-14.
2. Pati, J., et al. (2015). A Hybrid Modeling Approach for Software Clone Evolution Prediction, Proceedings of International Conference on Electrical Engineering and Computer Sciences (EECS-2015, Hong Kong). DOI:NA

Number of Patent Filed	Patent Name
01: Application No: 201811016656	A DEVICE FOR MODELLING SOFTWARE CLONE EVOLUTION ACROSS DIFFERENT VERSIONS AND A METHOD THEREOF.

## Teaching Subjects

- Database Management System
- Database Management System Lab (Oracle -11g)
- Computer Programming
- Object Oriented Programming
- Software Engineering
- Software Project, Process and Quality Management
- Data Science and Machine Learning
- Object Oriented Software Design
- Software Architecture