# RESUME

## Dr. TUSAR KANTI MISHRA

AD-08, Sai Oak Dale, Road-04, Carshed Junction, Pm Palem, Visakhapatnam (A.P.)



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#### **EXPERIENCE DETAILS:**

### **Research:**

- 1. Ph.D. Research Scholar at National Institute of Technology Rourkela (NIT Rourkela, FULL-TIME Researcher) (Jan, 2012 Dec, 2015) (04 years). (www.nitrkl.ac.in).
- 2. Erasmus Mundus Research Scholar at Bernaulliborg, University of Groningen, **The Netherlands** since Sept-2014.(<a href="www.rug.nl">www.rug.nl</a>). (06 months)

# **Teaching:**

- 1. Associate Professor in the Dept. of Computer Sc. & Engg. At Gayatri Vidya Parishad College of Engineering for Women from Apr-2019- till date.
- 2. Associate Professor in the Dept. of Computer Sc. & Engg, at ANITS, Visakhapatnam from Dec-2015 till Apr-2019, (3.5 years)
- 3. Lecturer (HOD) in the Dept. of Computer Sc. & Engg at P K A College of Engineering (PKACE), Bargarh, Odisha from Sept-2004 to July-2011. (6.11Years),
- 4. Lecturer in the Dept. of Computer Sc. & Engg at Silicon Institute of Technology, Sambalpur, Odisha from July-2011 to Dec-2011 (**0.6 Years**).

#### **AREA OF INTEREST:**

- 1. Pattern Recognition
- 2. Optical Character Recognition
- 3. Image Processing
- 4. Computer Vision
- 5. Feature Extraction and Classification
- 6. Artificial Intelligence

## 7. Image Data Mining

#### **SELECTED PUBLICATIONS:**

- 1. "Velocity adaptation based PSO for localization in wireless sensor networks", Evolutionary Intelligence, Springer, 1-9, DOI 10.1007/s12065-018-0170-4.(ESCI, Web of science, Scopus)
- 2. "PSO based Combined Kernel Learning Framework for Recognition of First-person Activity in a Video", Evolutionary Intelligence, Springer, Accepted. (ESCI, Web of science, Scopus)
- "Model based Odia numeral recognition using fuzzy aggregated features", Frontiers of Computer Science, Springer, Available online 26 Aug 2014, DOI: 10.1007/s11704-014-3354-9. (SCI, Scopus)
- 4. "A Generalizable Scheme Based on Contour Descriptors for Handwritten Odia Numerals Recognition", Journal of Information Processing Systems (JIPS, Journal for Accreditation by National Research Foundation of Korea), DOI:10.3745/JIPS.02.0012. (SCI, Scopus)
- 5. "Human recognition system for outdoor videos using Hidden Markov model", AEU International Journal of Electronics and Communications (Elsevier), Volume 68, Issue 3, March 2014, Pages 227–236. (SCI, Scopus)
- 6. "Shape Descriptors-based Generalized Scheme for Handwritten Character Recognition", International Journal of Computer Vision and Robotics, Inderscience publisher. Accepted.
- 7. "Time series quanslet: a novel primitive for image classification", Book: Contemporary Computing, Series: Communications in Computer and Information Science, Publisher: **Springer Berlin Heidelberg**, Vol.306, pp. 64-72, 2012.
- 8. "Background subtraction and human detection in outdoor surveillance using fuzzy logic", The 2013 **IEEE** International Conference on Fuzzy Systems (FUZZ-IEEE 2013).
- 9. Human Gesture Recognition in Still Images Using GMM Approach, Soumya Ranjan Mishra, Tusar Kanti Mishra, Goutam Sanyal, Anirban Sarkar, Intelligent Engineering Informatics, Springer, pp 561-569.
- 10. "A comparative analysis of image transformations for Odia numerals recognition", ICACCI-2012.
- 11. "Recognizing Handwritten Characters with Local Descriptors and Bags of Visual Words", Engineering Applications of Neural Networks, At Island of Rhodes, Greece, 2015.
- 12. "OHCS: A Database for Handwritten Odia Character Recognition", NCVPRIPG, IIT-Patna, 2015.

- 13. "Novel Approach of DNA Sequencing Algorithm to Image Security", CUTM International conference, IEEE, 2016.
- 14. "Automated Brain Tumor Detection Using Discriminative Clustering based MRI Segmentation", Tusar Kanti Mishra, Abhilash Panda and Vishnu Ganesh Phaniharam, Second International Conference on Smart Innovations in Communications and Computational Sciences (ICSICCS-2018), AISC, Springer (Scopus) (Accepted).
- 15. "Human Gesture Recognition in Still Images Using GMM Approach", Soumya Ranjan Mishra, Tusar Kanti Mishra, Goutam Sanyal, Anirban Sarkar First Online: 11 April 2018, "Advances in Intelligent Systems and Computing book series (AISC, volume 695)", Springer publication.
- 16. "Survey of Various Brain MRI Segmentation algorithms", International Conference on Recent Advances in Energy-efficient Computing and Communication 2018(IEEE-ICRAECC-18), S.V.P. Teja, Tusar Kanti Mishra IEEE-ICRAECC-2018, Kanyakumari, (Accepted).
- 17. "Heart Disease Risk Prediction using Pre-processing and Classification of Patients Data", K Prasanna Jyothi, Dr R SivaRanjani, Dr Tusar Kanti Mishra, S Ranjan Mishra, International Journal of Innovative Research in Computer and Communication Engineering, Vol. 5, Issue 7, July 2017, IJIRCCE DOI: 10.15680/IJIRCCE.2017. 0507065 13750.
- 18. "Probability Rule base Clustering approach for Heart disease Risk Prediction", International Journal of Electrical and Computer Engineering (IJECE), K Prasanna Jyothi, Dr. R Sivaranjani, Dr. Tusar Kanti Mishra, Intelligent Engineering Informatics pp 561-569, ISSN: 2088-8708.

### **EDUCATIONAL QUALIFICATION:**

Exam	Board/University	Year of passing	Percentage
B.Tech- Computer Sc. & Engg. From J.I.T.M (Now centurion Deemed University)	BPUT, Orissa	2004	75.06%( <b>Honours</b> )
M.Tech- Computer Science	Sambalpur University	2011	8.59 cgpa (80%)
Ph.D Computer Sc. & Engg.	National Inst. Of Technology, Rourkela, Orissa, India	2015	Awarded

#### **RESEARCH:**

- 1. As a **full-time research scholar** at NIT Rourkela, Worked on development of generic scheme for recognition of handwritten characters of multiple Indian languages under the esteemed guidance of Prof. B. Majhi. The works mainly focuses on *feature extraction*, *feature selection*, and *classification*.
- 2. Worked under the esteemed guidance of Professor L.R.B. Schomaker in the ALICE lab, The Netherlands on OCR.(06 months)

#### **ACTIVITIES/ ACHIEVEMENTS:**

- 1. Member of Board of Study committee, Sambalpur Unversity Inst. Of Inf. Tech,
- 2. Reviewer for Arabian Journal of System Engineering (AJSE-Springer)

# **Current organization (ANITS, Visakhapatnam)**

- 1. Organizing co-chair for SCI-2017, (International conference by Springer)
- 2. Applied for RPS proposal to AICTE in 2017,
- 3. Organizing co-chair, SCI-2017 international conference at ANITS, Visakhapatnam,
- 4. Technical session coordinator, SCI-2017 international conference at ANITS, Visakhapatnam,
- 5. Attended 07-days Faculty development program (FDP) by NITTTR-Chennai,
- 6. Co-ordinator for INDIA-2016 conference at ANITS, Visakhapatnam,
- 7. Organizer for Robotix tools and techniques, 2-days technical seminar, ANITS, Visakhapatnam,
- 8. Organizer for Workshop on Drone technology, 2-days technical workshop at ANITS Visakhapatnam,
- 9. Organizer and resource person, Image authentication techniques, one day technical seminar in the department of CSE, ANITS, Visakhapatnam,
- 10. Coordinated for setting up the DELD Lab in the department of CSE.
- 11. Organizing committee, ICAKMPET-2019, Visakhapatnam.

#### **Outside India**

- 1. Erasmus-mundus research scholarship for conducting research at The University of Groningen, The Netherlands under the supervision of Prof. LRB Schomaker, Director, ALICE Lab, for a period of 06-months.
- 2. Fellow member, ISRD.
- 3. Program committee, ICAIT, 2019.

### Other organizations

- 1. Reviewer committee member: Springer, AJSE,
- 2. Reviewer committee member: IGI Global,
- 3. Editor, Indonesian journal of Information Technology,
- 4. Organizing committee member, ICKAMPET, 2019,
- 5. Reviewer for FICTA.
- 6. Reviewer for ICDAR,
- 7. Convenor of tech fest event CYBONIX-2007, PKA College of Engineering, Odisha,
- 8. Student co-ordinator for WISDIP-2011 at NIT Rourkela,
- 9. Student co-ordinator for WISDIP-2012 at NIT Rourkela,
- 10. Reviewer for different international conferences through the easy chair,
- 11. Student co-ordinator for ICCCS, conference at NIT Rourkela,

### **GUIDANCE:**

1. Ph.D.: 01 (Continuing, Sri Satya Sai University, M.P.)

Post graduates: 06
 Under graduates: 34

# **EXTRA-CURRICULAR ACHIEVEMENTS:**

i) I have secured runners-up position in-Sambalpur-under-19-Chess tournament,

ii) I have won Inter college chess tournaments at different levels during under graduation study.

iii) I have been awarded by "Sahitya Swetapadma" for best poem and short story.

# **SOFTWARE EXPOSURE:**

Operating System/Databases	Programming Languages/Special Software	
<ul> <li>Windows-8.1/ 8/ 7/XP/98</li> <li>Oracle 8.0</li> <li>Sql</li> </ul>	<ul> <li>C</li> <li>C++</li> <li>MATLAB</li> <li>Visual Basic 6.0</li> <li>HTML,DHTML</li> <li>Weka Tools</li> <li>Latex technical writing</li> </ul>	

# PERSONAL INFORMATION:

Date of Birth	7 <sup>th</sup> Oct 1982
Sex	Male
Nationality	Indian
Marital Status	Married
Hobbies	Chess, Badminton
Permanent Address	C/O Mr. Narasingh Pr. Mishra,
	Sri Ram Vihar, Govindtola,
	Po: Dhanupali,
	Dist: Sambalpur, Odisha, PIN: 768005.

**DECLARATION:** I do hereby declare that all the information furnished above is true to the best of my knowledge and belief.

(Misar Yanti Mistra)