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- **3.** Institution: Radio Physics and Electronics department, Rajabajar Science College; University of Calcutta;
- 4. Date of Birth: 03/08/1985
- 5. Gender: Female
- 6. Academic Qualification (Undergraduate Onwards)

SI.No.	DEGREE	YEAR	SUBJECT	UNIVERSITY/INSTITUTION
1.	BTech	2007	ECE	Haldia Institute of Technology
2.	ME	2009	ETCE	Jadavpur University
3.	Ph.D	2013	Pattern Recognition	Jadavpur University

7. A) Ph.D thesis title: A Computational Approach to Multimodal Emotion Recognition

B) Guide's Name: Prof. Amit Konar

C)Institute/Organization/University: Jadavpur University

D) Year of Award: 2013

## 8. Work experience (in chronological order)

SI. No.	Positions Held	Name of the Institute	From	То
1.	Assistant Professor	University of Calcutta	1st April, 2016	Till date
2.	Assistant Professor	Heritage Institute of Technology	15th July, 2013	31st March, 2016

# 9. Professional Recognition/ Award/ Prize/ Certificate/Project/ Fellowship received by the applicant.

SI. No.	Name of the Project/Award	Awarding Agency	Year
1.	"Providing limbic support to a partially paralytic person by generating movement to his/her paralytic hand by imitating the gesture of the other healthy hand and also develop "Sensation of touch" to it"	SERB, DST	2017 to till date
2.	Senior Research Fellowship	West Bengal Government	2009-2013
3.	GATE Scholarship	UGC	2007-2009

# 10. Total Number of Published Papers: ${f 32}$

# 11. Journal Publications:

SI. No.	Author(s)	Title	Name of Journal	Volume	Page	Year
1.	Tapabrata Chakraborti, Amitava Chatterjee, <b>Anisha</b> <b>Halder</b> and Amit Konar	Automated emotion recognition employing a novel modified binary quantum-behaved gravitational search algorithm with differential mutation	Expert Systems: The Journal of Knowledge Engineering , Wiley- Blackwell Publishers	vol. 32, no. 4	рр. 522- 530	2015
2.	Anisha Halder, Rajshree Mandal, Pavel Bhowmik, Aruna Chakraborty, Amit Konar and Nikhil R. Pal	General and Interval Type-2 Fuzzy Face-Space Approach to Emotion Recognition	IEEE Trans. on Systems, Man and Cybernetics, Part-A	vol. 43, no. 3	рр. 587- 605	2013
3.	Anisha Halder, Rajshree Mandal, and Amit Konar	Fuzzy Based Hierarchical Algorithm for Template Matching in Emotional Facial Images	Journal of Intelligent and Fuzzy Systems, IOS Press	vol. 24, no. 2	рр. 201- 214	2013
4.	Anisha Halder, Aruna Chakraborty, Amit Konar and Srishti Shaw	A New Approach to Emotion Recognition from the Lip Contour of a Subject	Journal of Artificial Intelligence and tools	vol. 21, no. 2	рр. 1- 17	2012

### 12. Books/Reports/Chapters/General articles etc: (Book Chapters)

SI. No.	Name of the Books and Editor	Title of the Chapter	Author's Name	Publisher	Year
1.	Synthesizing Human Emotion in Intelligent Systems and Robotics, Jordi Vallverdu(eds)	Computing with Word Model for Emotion recognition Using Interval Type-2 Fuzzy Sets	Reshma Kar, <b>Anisha</b> <b>Halder</b> , Amit Konar, Aruna Chakraborty and Atulya K. Nagar	IGI Global,	2015
2.	Emotion Recognition, Amit Konar and Aruna Chakraborty (eds.)	Emotion Recognition from Facial Expressions Using Type-2 Fuzzy Sets	Anisha Halder, Amit Konar, Aruna Chakraborty and Rajshree Mandal	Wiley- Blackwell	2014
3.	<i>Emotion Recognition</i> , Amit Konar and Aruna Chakraborty (eds.)	A Review of Pattern Recognition Techniques	Amit Konar, Aruna Chakraborty and Anisha Halder	Wiley- Blackwell	2014
4.	Modern Image Processing Algorithms Employing Computational Intelligence Techniques, Amitava Chatterjee and Patrick Siarry (Eds.)	A Computational Intelligence Approach to Emotion Recognition from the Lip Profile of a Subject	Anisha Halder, Srishti Shaw, Kanika Orea, Pavel Bhowmik, Aruna Chakraborty, and Amit Konar	Springer	2011
5.	Modern Image Processing Algorithms Employing Computational Intelligence Techniques, Amitava Chatterjee and Patrick Siarry (Eds.)	A Fuzzy Condition Sensitive Hierarchical Algorithm for Approximate Template Matching in Dynamic Image Sequence	Rajshree Mandal, Anisha Halder, Amit Konar and Atulya K. Nagar	Springer	2011
6.	Cross-Disciplinary Applications of Artificial Intelligence and Pattern Recognition: Advancing Technologies	Emotion Recognition from Facial Expression and Electroencephalogram Signals	Amit Konar, Aruna Chakraborty, Pavel Bhowmik, Sauvik Das, and <b>Anisha</b> Halder	IGI Global	2010

#### 13. Publications in conference proceedings.

- 1. "Design of a Computationally Economical Image Classifier using Generic Features," by Rohan Basu Roy, Anisha Halder Roy, Amit Konar and Atulya K. Nagar, in CEC-IEEE, New Zealand, June, 2019.
- 2. "Detection of Stress in Human Brain," by Prithwijit Mukherjee, and Anisha Halder Roy, in ICACCP-IEEE, Sikkim, February, 2019.
- 3. Anisha Halder, Aruna Chakraborty, Amit Konar and Atulya K. Nagar, "Computing with Words Model for Emotion Recognition by Facial Expression Analysis Using Interval Type-2 Fuzzy Sets," in FUZZ-IEEE, Hyderabad, India, July, 2013.
- 4. Anisha Halder, Pratyusha Rakshit, Sumantra Chakraborty, Amit Konar, Eunjin Kim, and Atulya K. Nagar, "Reducing Uncertainty in Interval Type-2 Fuzzy Sets for Qualitative Improvement in Emotion Recognition from Facial Expressions," in FUZZ-IEEE, 2012, pp. 1-8, Brisbane, Australia.
- 5. Anisha Halder, Rajshree Mandal, Aruna Chakraborty, Amit Konar and R. Janarthanan, "Application of General Type-2 Fuzzy set in Emotion Recognition from Facial Expression," in Joint International Conference on Swarm Evolutionary and Memetic computing, SEMCCO-2011 pp. 460-468, Vishakhapatnam, AP,India.
- 6. Anisha Halder, Pratyusha Rakshit, Aruna Chakraborty, Amit Konar, and and R. Janarthanan, "Emotion Recognition from the Lip-contour of a subject using Artificial Bee-Colony Optimization Algorithm," in Joint International Conference on Swarm Evolutionary and Memetic computing, (SEMCCO-2011), pp. 610-617, Vishakhapatnam, AP,India.
- 7. Anirbaan Basu and Anisha Halder, "Voice and Facial Expression Based Classification of Emotion Using Linear Support vector machine" in International Conference on Electronics, Communication and Instrumentation, Heritage Institute of Technology, Kolkata, India, January, 2014.
- 8. Anisha Halder, Arindam Jati, Garima Singh, Amit Konar, Aruna Chakraborty, R. Janarthanan, "Facial Action Point Based Emotion Recognition by Principal Component Analysis," in SocPros-2011, pp. 721-733, Indian Institute of Technology, Roorkey, India.

- 9. Pratyusha Rakshit, Arup Kumar Sadhu, Anisha Halder, Amit Konar, R.Janarthanan, "Multi-Robot Box Pushing using Differential Evolution Algorithm for Multiobjective Optimization," in SocPros-2011, pp. 355-365, Indian Institute of Technology, Roorkey, India.
- 10. Anisha Halder, Rajshree Mandal, Amit Konar, Aruna Chakraborty, and R. Janarthanan, "Emotion Recognition from Facial Expression using General Type-2 Fuzzy Set," in RETIS-2011, pp. 263-268, Jadavpur University, Kolkata, India.
- 11. Anisha Halder, Amit Konar, "Type-2 Fuzzy Sets in Emotion Recognition from Facial Expression," in International Workshop on Fuzzy Sets- Rough Sets- Uncertainty analysis and Applications (FRUAA- 2011), National Institute of Technology, Durgapur, India.
- 12. Amit Konar, Aruna Chakraborty, Anisha Halder, Rajshree Mandal, and R. Janarthanan, "Interval Type-2 Fuzzy Model for Emotion Recognition from Facial Expression," in PerMIn-2012, pp. 114-121, CDAC, Kolkata.
- 13. Rajshree Mandal, Anisha Halder, Pavel Bhowmik, Aruna Chakraborty and Amit Konar, "Uncertainty Management in Type-2 Fuzzy Face-Space for Emotion Recognition," *Proc. of FUZZ-IEEE*, Taiwan, Chaina, pp. 1902-1909, 2011.
- 14. Rajshree Mandal, Anisha Halder, Amit Konar, and Atulya K. Nagar "A Fuzzy Condition Sensitive Hierarchical Algorithm for Template Matching in Emotionally Expressive Facial Images", *IPCV'11*, July 18-21, 2011, Las Vegas, Nevada, USA.
- **15.** Sristi Shaw, Kanika Orea, Pavel Bhowmik, **Anisha Halder**, Aruna Chakraborty, Amit Konar and Atulya K. Nagar **"Evolvable Lip Contour Model for Emotion Recognition"**, *ICAI'11*, July 18-21, 2011, Las Vegas, Nevada, USA.
- 16. Rajshree Mandal, Anisha Halder, Amit Konar and R. Janarthanan "A Decision Tree Inspired Hierarchical Algorithm for Approximate Template Matching", *INCOS-2011*, IEEE.
- 17. Aruna Chakraborty, Amit Konar, Anisha Halder and Enjun Kim "Emotion Control by Audio-Visual Stimulus Us- ing Fuzzy Automata", *Proc. of FUZZ-IEEE*, pp. 1-8, Barcelona, Spain, 2010.
- Sauvik Das, Pavel Bhowmik, Anisha Halder, Aruna Chakraborty, Amit Konar, Atulya Nagar "Emotion Recognition from Facial Expression and Electroencephalographic Signals Using Vector Quantization and Support Vector Machines". IC-Al 2010, pp. 710-715, July 12-15, 2011, Las Vegas, Nevada, USA.
- Aruna Chakraborty, Pavel Bhowmik, Sauvik Das, Anisha Halder, Amit Konar, Atulya K. Nagar, "Correlation between Stimulated Emotion Extracted from EEG and its Manifestation on Facial Expression", IEEE Systems, Man and Cybernetics Conf., pp. 3131-3137, Texas, 2009
- 20. Sauvik Das, Anisha Halder, Pavel Bhowmik, Aruna Chakraborty, Amit Konar, A.K. Nagar, "Voice and Facial Expression Based Classification of Emotion Using Linear Support Vector Machine", *DESE Conf.*, pp. 377-384, Abu Dhabi, UAE, 2009.
- 21. S. Das, Anisha Halder, P. Bhowmik, A. Chakraborty, A. Konar1, R. Janarthanan "A Support Vector Machine Classifier of Emotion from Voice and Facial Expression Data", NABIC Conf., pp. 1010-1015, 2009.
- P. Bhowmik, S. Das, Anisha Halder, A. Chakraborty, A. Konar, R. Janarthanan, "Emotion Classifier from Stimulated EEG Signals by Support Vector Machine", NCIICT Conf., pp. 1-10, Coimbatore, Tamil Nadu, India, 2009.