# Rajib Debnath

Ph.D. Research Scholar, CSE Dept., Tripura University (A Central University)

College Tilla Professor Para, Near Bijoy Apartment, Agartala, Tripura(W)-799004 (+91)-9862024392 ⊠ rajibdebnath.cse@gmail.com



#### Personal Details

• Name: Rajib Debnath

• Father's Name: Shrish Ch. Debnath

• Date of Birth:  $25^t h June$ , 1988

• Nationality: Indian • Category: OBC

• E-Mail: rajibdebnath.cse@gmail.com/ rajib.cse@tripurauniv.in

• Contact No.: +91-9862024392, +91-7005199517

o Residential Address: College Tilla, Professor Para, Near Bijoy Apartment, Agartala, West, Tripura - 799004, India

## Education

2016- Pursuing Ph.D. in Computer Science & Engineering, Tripura University (A

Present Central University), Suryamaninagar, India-799022. Registration No.: Ph.D/10/CSE/07/16, Dated: 26.09.2016

2010–2012 M. Tech in Computer Science & Engineering, Tripura University (A Central University), Suryamaninagar, India-799022.

Grade -  $\mathbf{B} \mid \text{Marks: } \mathbf{72.30\%}$ 

2006–2010 B. Tech in Information Technology, Bengal Institute of Technology & Management (BITM), Shantiniketan, Bolpur, West Bengal, India.

Grade - 7.0

## Experience

14/06/2019 Junior Research Fellow, DRDO, Govt. of India Funded Project, Entitled Develop-Present ment of Object Detection Techniques from Degraded Complex Video Sequences Due to Dynamic Variation of Scenes by Different Atmospheric Conditions for Security  $\mathscr E$ Surveillance, in the Department of Computer Science & Engineering, Tripura University (A Central University), Tripura, India.

26/12/2013- Research Assistant, DeitY, MCIT, New Delhi, Govt. of India Funded Project, 31/08/2014 Entitled Creation of a Visual Face Database of North-Eastern People & Implementation of Techniques for Face Identification, in the Department of Computer Science & Engineering, Tripura University (A Central University), Tripura, India.

28/05/2012 **Project Assistant**, DeitY, MCIT, New Delhi, Govt. of India Funded Project, -25/12/2013 Entitled Creation of a Visual Face Database of North-Eastern People & Implementation of Techniques for Face Identification, in the Department of Computer Science & Engineering, Tripura University (A Central University), Tripura, India.

#### Area of Interest

- Image and Video Processing
- o Computer Vision and Video Surveillance
- Pattern Recognition

## Language Known

o C, Java, Python, Matlab, PHP, HTML

#### Invited Talk

Delivered a Talk as a Resource Person in Short Term Training Programme (STTP) on "Computational Information Processing and Data Security", held on 22.02.2016 to 02.03.2016, organized by Department of Information Technology and Funded by University Grants Commission (UGC), IQAC, Bir Bikram Memorial College (BBMC), Tripura

## Seminars / Courses / Workshop attended

- Attended MHRD Initiative Global Initiative of Academic Networks (GIAN) course on "Image and Video Forensics", Organized by Department of Computer Science and Engineering, Tripura University, 12-16 March, 2018.
- Attended MHRD Initiative Global Initiative of Academic Networks (GIAN) course on "Contrast Enhancement in Poor Visibility", Organized by Department of Computer Science and Engineering, Tripura University (A Central University), 5-9 March, 2018.
- Workshop on "Photonics, Electronics, Nano Technology, Integrated Circuits and Systems", from 29.02.2016 to 04.03.2016 at Tripura University, organized by Institute of Radio Physics and Electronics, University of Calcutta in collaboration with Department of Electrical Engineering, Tripura University, India.
- o 18<sup>th</sup> Workshop on "Computational Information Processing", from 04.02.2016 to 05.02.2016 at Dasaratha Deb Memorial College, Khowai, Tripura, organized by Electronics and Communication Sciences Unit, Indian Statistical Institute (ISI), Kolkata, India.
- National Level Workshop on "Computational Aspects of Inflammatory Pain Related Diseases", on 20.11.2015, organized by department of Computer Science & Engineering, Tripura University (A Central University), Tripura, India.
- Two Days National Workshop on "Emerging Areas in Wireless Networks & Communication", from 01.08.2015 to 02.08.2015 at Tripura University, Jointly organized by The Institute of Engineers (India), Tripura State Centre & Department of Computer Science & Engineering and Department of Information Technology, Tripura University (A Central University), Tripura, India.

- Workshop on "North-East Summer Workshop in Analysis and Probability 2015 (NE-SWAP2015)", from 27.06.2015 to 30.06.2015 at Tripura University, organized by Department of Mathematics in collaboration with Indian Statistical Institute (ISI), Bangalore, India.
- Author Workshop on "How to Use Online Resources and Develop Skills to Write and Publish", on 25.03.2015, organized by Wiley in collaboration with Central Library, Tripura University, at Tripura University, Agartala
- Workshop on "Fundamentals of Image Analysis and Pattern Recognition", from 06.02.2015 to 08.02.2015 at Tripura University, organized by Department of Computer Science & Engineering in collaboration with Department of Information Technology, Tripura University (A Central University), Tripura, India.
- Author Workshop on "Skill Development to Write Scientific Literature, Quality Improvement of Manuscript for Publication Success" on 18.11.2014, organized by Springer in collaboration with Central Library, Tripura University, at Tripura University, Agartala.
- Author Workshop on "Understanding the books & Journal Article Publishing Process", on 26.09.2014, organized by Elsevier in collaboration with Central Library, Tripura University, at Tripura University, Agartala.
- Workshop on "Activities of Society for Applied Microwave Electronics Engineering & Research in Emerging Fields of Computer & Electronics Science & Engineering", on 05.07.2014, organized by Computer Science & Engineering Department, Tripura University (A Central University), Tripura, and SAMEER, IIT Bombay Campus, Powai, Mumbai, India.
- Participated a National Seminar on, "E-resource and E-learning: Challenges and Opportunities for students", from 25.07.14 to 26.07.14, organized by Department of Information Technology, Bir Bikram Memorial College (BBMC), College Tilla, Agartala, and Sponsored by UGC.
- Workshop on "Digital Holography", from 23.05.2013 to 24.05.2013, organized by Department of Computer Science & Engineering and Department of Information Technology, Tripura University (A Central University), Tripura, India.
- Completed a Course on VB.NET, from February 2010 to April 2010, at the Brainware Computer Academy, Y8 Block EP, Sector V, Salt Lake, Kolkata 700091, with the performance of Very Good (70% or above and below 80%).
- Completed a Course on **Core Java**, from 25th June 2008 to 6th August 2008, at the **IBM Advanced Career Education**, 17 (15/1) Ghoshpara Road, 1st Floor, Barrackpore, 24 Pgs. (North), Kol 700120, with the **Grade C**.

## Laboratory Visits / Internships

• National Institute of Electronics and Information Technology (NIELIT), Itanagar, visit from 19.05.2014 to 30.05.2014, to create the Department of Electronics & Information Technology – Tripura University (DeitY - TU) Face Database, sponsored by DeitY, MCIT, New Delhi, India

- North Eastern Hill University (NEHU), Shillong, visit from 04.03.2014 to 20.03.2014, to create the Department of Electronics & Information Technology Tripura University (DeitY TU) Face Database, sponsored by DeitY, MCIT, New Delhi, India.
- National Institute of Electronics and Information Technology (NIELIT), Imphal, visit from 22.09.2012 to 06.10.2012, to create the Department of Electronics & Information Technology Tripura University (DeitY TU) Face Database, sponsored by DeitY, MCIT, New Delhi, India.
- National Institute of Electronics and Information Technology (NIELIT), Kohima, visit from 22.07.2012 to 6.08.2012, to create the Department of Electronics & Information Technology Tripura University (DeitY TU) Face Database, sponsored by DeitY, MCIT, New Delhi, India.
- National Institute of Electronics and Information Technology (NIELIT), Guwahati, visit from 28.02.2012 to 16.03.2012, to create the Department of Electronics & Information Technology Tripura University (DeitY TU) Face Database, sponsored by DeitY, MCIT, New Delhi, India.
- National Institute of Electronics and Information Technology (NIELIT), Aizawl, visit from 23.01.2012 to 4.02.2012, to create the Department of Electronics & Information Technology Tripura University (DeitY TU) Face Database, sponsored by DeitY, MCIT, New Delhi, India.
- A Practical Training on "Computer Network and Communication", during the period from 29.06.2009 to 25.07.2009 under SDE (BD), SDE (Computer) Agartala, at Bharat Sanchar Nigam Limited Telecom, A Govt. of India Enterprise, Agartala, Tripura, India

# Conference/ Seminar Presentation

- Presented a paper on "Moving Object Detection under sudden Change of Illumination: A Review", in the *International Conference on Computational Intelligence & IoT (ICCIIoT 2018)*, 14-15 December 2018, Organized by National Institute of Technology Agartala, Tripura, India.
- Presented a paper on "Surface Plasmon Resonance Spectroscopy Observed in Kretschmann Prism System with Titanium and Gold Thin Films", in the Second Intl. Conference on Material Science (ICMS 2017), Feb. 16-18, 2017, Organized by Department of Physics, Tripura University (A Central University), Tripura, (Paper ID: 10TFSS).
- Presented a paper on "Analysis of Surface Plasmon Resonance for Incoherent Light Sources", in the Second Intl. Conference on Material Science (ICMS 2017), Feb. 16-18, 2017, Organized by Department of Physics, Tripura University (A Central University), Tripura, (Paper ID: 07ST).
- Presented a paper on "North-East Indian Face Database: Its Design and Aspects", in the 4<sup>th</sup> International Conference on Advances in Recent Technologies in Communication and Computing, ARTCom 2012, October 19-20, 2012, Organized by Association of Computer Electronics and Electrical Engineers (ACEEE), Bangalore, India.

Presented a paper on "Comparative Studies on Holistic and Local Feature-based Face Recognition Techniques Using Optical and Infrared Images", in the 3<sup>r</sup>d National Conference on Emerging Trends and Application in Computer Science (NCETACS 12), March 30-31, 2012, Organized by Department of Computer Science and Internal Quality Assurance Cell, St. Anthony's College, Shillong – 793001, Meghalaya, India.

#### **Publications**

- Rajib Debnath, and Mrinal Kanti Bhowmik, "Moving Object Detection Under Sudden Change of Illumination: A Review" (March 22, 2019). International Journal of Computational Intelligence & IoT, Vol. 2, No. 3, 2019. Available at SSRN: https://ssrn.com/abstract=3358306
- A. K. Ghosh, Rajib Debnath, U. Das and M. K. Bhowmik, "Surface Plasmon Resonance Spectroscopy Observed in Kretschmann Prism System with Titanium and Gold Thin Films", Proceedings of Second International Conference on Material Science (ICMS 2017), Organized by Department of Physics, Tripura University (A Central University), Tripura, Feb. 16-18, 2017 (paper no. 10TFSS).
- A. K. Ghosh, Rajib Debnath, and M. K. Bhowmik, "Analysis of Surface Plasmon Resonance for Incoherent Light Sources", Proceedings of Second International Conference on Material Science (ICMS 2017), Organized by Department of Physics, Tripura University (A Central University), Tripura, Feb. 16-18, 2017 (paper no. 07ST).
- O Goutam Majumder, Rajib Debnath, Mrinal Kanti Bhowmik, Debotosh Bhattacharjee and Mita Nasipuri, "Image Registration of North-Eastern Indian (NEI) Face Database", 1st International Conference on Intelligent Infrastructure, organized by Computer Society of India Kolkata Chapter (CSI 2012), Science City, Kolkata, India, published by McGraw Hill, pp. 286-290, Dec 1-2, 2012, ISBN-13: 978-1-25-906170-7, ISBN-10: 1-25-906170-1.
- Kankan Saha, Rajib Debnath, Mrinal Kanti Bhowmik, Debotosh Bhattacharjee, and Mita Nasipuri, "North-East Indian Face Database: Its Design and Aspects", Proceedings of the 4<sup>th</sup> International Conference on Advances in Recent Technologies in Communication and Computing (ARTCom 2012), Bangalore, India, organized by the Association of Computer Electronics and Electrical Engineers (ACEEE), published by IET, Electronic ISBN: 978-1-84919-929-2, DOI: 10.1049/cp.2012.2546
- Mrinal Kanti Bhowmik, Arup Ratan Bhowmik, Rajib Debnath, Debotosh Bhattacharjee, "A Comparative Studies Holistic & Local Feature-based Face Recognition Techniques using Optical and Infrared (IR) Images", 3rd National Conference on Emerging Trends and Applications in Computer Science, St. Anthony's College, Shillong, India,pp:102-114, 30-31 March, 2012, published by IEEE xplore.