




# SUDIPTA BANERJEE

Assistant Professor

## CONTACT

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 <https://sudban-3089.github.io/>

## SKILLS

Programming skills include MATLAB, Python, C#, MySQL

Mentoring skills include designing projects and presentations, delivering lectures and guiding students through lab exercises

## EDUCATION

### Ph.D. / Computer Science and Engineering

Michigan State University,  
United States

2015 – 2020

4.0/4.0 CGPA

### M.E. / Electronics and Telecommunication Engineering

Jadavpur University, India

2012 – 2014

9.72/10.0 CGPA

### B. Tech. / Electronics and Communication Engineering

West Bengal University of  
Technology, India

2007 – 2011

8.91/10.0 DGPA

## REFERENCES

**Arun Ross**, Professor, Michigan State University, United States

 [rossarun@cse.msu.edu](mailto:rossarun@cse.msu.edu)

**Johannes M. Bauer**, Professor, Michigan State University, United States

 [bauerj@msu.edu](mailto:bauerj@msu.edu)

**Ruth Shillair**, Associate Professor

Michigan State University, United States

 [shillai7@msu.edu](mailto:shillai7@msu.edu)

## ABOUT ME

Assistant Professor in Center for Visual Information Technology (CVIT) at International Institute of Information Technology (IIIT\_H), Hyderabad, India since August 2021. Completed doctoral studies and post-doctoral research in the Department of Computer Science and Engineering from Michigan State University from August 2015 to June 2021 under the supervision of Professor Arun Ross. Have research interests in pattern recognition, computer vision, digital image forensics and biometrics. Looking to leverage my research and mentoring skills in seeking a position for a tenure-track assistant professor in a reputed research university.

## SELECTED PUBLICATIONS

- [S. Banerjee](#), T. Swearingen, R. Shillair, J. Bauer, T. Holt and A. Ross, "Analysis of Cyberattack Patterns Across Longitudinal Data", Using Machine Learning to Examine Cyberattack Patterns on Web Defacement Data", Social Science Computer Review, 2021
- A. Ross, [S. Banerjee](#) and A. Chowdhury, "Security in Smart Cities: A Brief Review of Digital Forensic Schemes for Biometric Data", Pattern Recognition Letters 2020
- [S. Banerjee](#) and A. Ross, "Face Phylogeny Tree Using Basis Functions", IEEE Transactions on Biometrics, Behavior and Identity Science (T-BIOM), 2020
- V.N. Gangapure, [S. Banerjee](#) and A. S. Chowdhury, "Steerable Local Frequency Based Multispectral Multifocus Image Fusion", Information Fusion, Vol. 23, pp. 99-115, 2015
- [S. Banerjee](#) and A. Ross, "Conditional Identity Disentanglement for Differential Face Morph Detection", International Joint Conference on Biometrics, 2021
- [S. Banerjee](#) and A. Ross, "One Shot Representational Learning for Joint Biometric and Device Authentication", 25<sup>th</sup> International Conference on Pattern Recognition, 2020
- [S. Banerjee](#) and A. Ross, "Smartphone Camera De-identification while Preserving Biometric Utility", 10<sup>th</sup> International Conference on Biometrics, Theory, Applications and Systems, (Tampa, USA), 2019
- [S. Banerjee](#) and A. Ross, "Face Phylogeny Tree: Deducing Relationships Between Near-Duplicate Face Images Using Legendre Polynomials and Radial Basis Functions", 10<sup>th</sup> International Conference on Biometrics, Theory, Applications and Systems, (Tampa, USA), 2019 *Best Paper and Best Poster Award*
- A. Ross, [S. Banerjee](#), and others, "Some Research Problems in Biometrics: The Future Beckons", 12<sup>th</sup> International Conference on Biometrics, (Crete, Greece), 2019
- [S. Banerjee](#), V. Mirjalili and A. Ross, "Spoofing PRNU Patterns of Iris Sensors while Preserving Iris Recognition", 5<sup>th</sup> International Conference on Identity, Security and Behavior Analysis, (Hyderabad, India), 2019 *Best Paper Award*
- [S. Banerjee](#) and A. Ross, "Computing an Image Phylogeny Tree from Photometrically Modified Iris Images", 3<sup>rd</sup> International Conference on Joint Biometrics, (Denver, USA), 2017
- [S. Banerjee](#) and A. Ross, "Impact of Photometric Transformations on PRNU Estimation Schemes: A Case Study Using Near-Infrared Ocular Images", International Workshop on Biometrics and Forensics, (Sassari, Italy), 2018 *Best Student Paper Award*

## EXPERIENCES AND ACHIEVEMENTS

- Experience as an Assistant Professor in IIIT-H from August 2021 to current. Experience as graduate teaching assistant in Michigan State University in Fall 2015 and Spring 2016. Assisted Professor in Fall 2018 and Spring 2020 in preparing lecture slides and grading. Served as a reviewer for Pattern Recognition, Forensic Science International and Springer Nature Computer Science journals
- Participated in outreach activities such as Summer Research Opportunities Program, Women in Engineering, High School Engineering Institute and Research Experience for Teachers Training program
- Recipient of Michigan State University Outstanding Graduate Student Award 2020-2021 and Graduate Symposium Poster Awards (Honorable Mention) in 2016-2018
- Recipient of Women in Computer Vision Workshop Award to attend workshop in Hawaii, USA, 2017 and attend International Summer School in Biometrics with scholarship Alghero, Italy, 2018