



Subhranil Mustafi

M.Tech in Information Technology
(Gold Medalist)

- ▶ 305/1 Shyama Prasad Pally,
Ranaghat Nadia, West Bengal
- ▶ India
- ▶ Unmarried

Skills

Image Processing



Machine Learning



Internet of Things



Python



C/C++/Java



LaTeX



Research Guidance



English



Bengali



Hindi



Biography

I am Subhranil Mustafi, passed M.Tech in Information Technology from Kalyani Government Engineering College in 2020. I was a Junior Research Fellow in a Project funded by DST-SERB, Government of India, where I developed a model for classification of different grades of downy mildew disease based on their severity, using Hyperspectral Imaging from 400-1000 nm. My area of interest is in the fields of Image Processing, Spectral Signature Classification of Hyperpsectral Image Processing and Development of Intelligent Models using Deep Learning. Long term goal is an academic and research career including research and development.

Work experience

Junior Research Fellow | Project by DST-SERB

01/2021 - 06/2021

Department of Information Technology (Dr. Satyendra Nath Mandal)
Kalyani Government Engineering College

I developed a model for classification of different grades of downy mildew disease based on their severity, using Hyperspectral Imaging from 400-1000 nm. Also, other motive was to develop Spectral Signature Classification of Hyperpsectral Image Processing and Development of Intelligent Models using Deep Learning.

Teaching Assistant

08/2018 - 07/2020

Department of Information Technology (Dr. Satyendra Nath Mandal)
Kalyani Government Engineering College

Teaching Assistantship for pursuing M.Tech through GATE as per the curriculum, in the specialization of Operating Systems and Algorithms Lab

Entrepreneurship Bootcamp - New Delhi

07/2019 - 09/2019

Digital India Corporation
Ministry of Electronics and Information Technology
Government of India

Learnt the basic development of the commercialisation of the invented technology in identifying Individual Goats through Iris Images and application in the real field for enhancing the economy and calculation of the demand in market.

Research Internship

02/2017 - 04/2018

Department of Information Technology (Dr. Satyendra Nath Mandal)
Digital India Corporation
Ministry of Electronics and Information Technology
Government of India

Image based Systems for Identification of Individuals, Breeds and Diseases of Pigs and Goats. The Objective from my side was:

- i. Acquisition of Iris Images of Goats
- ii. Pen- paper based algorithmic design of iris using Image processing (Building the segmentation algorithm for non-circular iris)
- iii. Validation of the Technology in the real-world data based on the ground truth.

Inter-Semester Training

07/2016 - 08/2016

Android Application Development using Java
Ardent Computech Pvt. Ltd

Here, a chat application has been developed using the bluetooth API and later modified using the concept of Wi-Fi Direct.

Awards & Achievements

June 2021

Provisionally Awarded DST-INSPIRE Fellowship

Topper of Maulana Abul Kalam Azad University of Technology

May 2021

Research Excellence Award

Institute of Scholars

Master's Thesis: "GRIT: Novel Identification System of Goats using Retinal Imaging Technology".

January 2020

Best Paper Award

COMSYS 2020: First International Conference on Frontiers in Computing and Systems
Jalpaiguri Government Engineering College, West Bengal
Paper Name: "Pig Breed Detection using Faster-RCNN".

August 2018

Best Student Project Award

TCS Academic Interface Programme Awards

Bachelor's Project Report Name: "Image Based Unique Identification of Goat Using Iris Pattern Analysis".

March 2018

GATE: Qualified in Computer Science & Information Technology

Interests

- ▶ Photography
- ▶ Travel

Education

M.Tech | Information Technology

08/2018 - 07/2020

Kalyani Government Engineering College
Maulana Abul Kalam Azad University of Technology
Total GPA: 10
Obtained GPA: 9.46

B.Tech | Information Technology

08/2014 - 07/2018

Kalyani Government Engineering College
Maulana Abul Kalam Azad University of Technology
Total GPA: 10
Obtained GPA: 8.44

Higher Secondary | CBSE

05/2012 - 03/2014

All India Senior School Certificate Examination
Kendriya Vidyalaya No.2 Kanchrapara
Obtained Percentage: 89.60

Secondary | CISCE

05/2002 - 07/2012

Indian Certificate of Secondary Education
Convent of Jesus & Mary, Ranaghat
Obtained Percentage: 91.00

Publications

- Mustafi, S. & Ghosh, P. & Mandal, S.N. (2021). "RetIS: Unique Identification System of Goats through Retinal Analysis". In: *Computers and Electronics in agriculture*, Elsevier, Volume 185, pp 106127, July 2021.
- Mustafi, S. & Ghosh, P. & Roy, K. & Dan, S. & Mukherjee, K. & Nath Mandal, S. (2021). "Drones for Intelligent Agricultural Management". In: *IoT-based Intelligent Modelling for Environmental and Ecological Engineering. Lecture Notes on Data Engineering and Communications Technologies*, Springer, Volume 67, 2021.
- Mustafi, S. & Ghosh, P. & Dan, S. & Mukherjee, K. & Roy, K. & Nath Mandal, S. (2020). "Biometrics-Based Pig Identification: From Invention to Commercialisation.". In: *Proceedings of Electronic Systems and Intelligent Computing. Lecture Notes in Electrical Engineering*, Springer, Volume 686, 2020.
- Mustafi, S. & Ghosh, P. & Dan, S. & Mukherjee, K. & Roy, K. & Nath Mandal, S. (2020). "Entrepreneurship Possibility on Goat Farming in India". In: *Acta Scientific Agriculture*, Acta, Vol 5.2, pp 24-32, 2020
- Ghosh, P. & Mustafi, S. & Dan, S. & Mukherjee, K. & Roy, K. & Nath Mandal, S. (2020). "Pig Breed Detection Using Faster RCNN". In: *Advances in Intelligent Systems and Computing*, Springer, Volume 1255, 2020.
- Mukherjee, K. & Dan, S. & Roy, K. & Roy, S. & Nath Mandal, S. & Mustafi, S. & Ghosh, P. & Hajra, D. & Banik, S. & Naskar, S. (2020): "CNN Based Individual

Contact

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Gmail

LinkedIn

Google Scholar

Research Gate

Ghungroo Breed Identification using Face Based Image". In: *Proceedings of Electronic Systems and Intelligent Computing. Lecture Notes in Electrical Engineering*, Springer, Volume 686, 2020.

- Roy, K. & Dan, S. & Mukherjee, K. & Mustafi, S. & Ghosh, P. & Mandal, S.N. & Dutta, S. & Chakraborty, A. (2020): "Development of Image Based Disease Scale of Phoma Blight of Potato using K-means Clustering", Springer, Volume 686, 2020.
- Mandal, S.N. & Dan, S. & Ghosh, P. & Mustafi, S. & Roy, K. & Mukherjee, K. (2019): "Identification of Goat Breeds by Digital Image using Convolutional Neural Network", Reason-A Technical Journal (Formerly Reason-A Technical Magazine), Vol 18, pp 72-82, 2019.
- Mandal, S.N. & Ghosh, P. & Mukherjee, K. & Dan, S. & Mustafi, S. & Roy, K. & Hajra, D. & Banik, S. (2020): "InceptGI: A ConvNet Based Classification Model for Identifying Goat Breeds in India", J. Inst. Eng. India Ser. B, Vol 101, pp 573-584, 2020.
- Mandal, S. N. & Dan, S. & Ghosh, P. & Mustafi, S. & Roy, K. & Mukherjee, K. & Hajra, D. K. & Banik, S. (2019): "Pig Breeds Classification using Neuro-Statistic Model", Science Technology Journal, Vol 7(2), pp 78-88.

Technical Skills

Acta Scientific - International Open Library
Wiley Publishers (Verified at publons.com)

Reviewer

MATLAB, Jupyter

Preferred IDE

Degree Thesis

Bachelor of Technology

Image Based Identification of Goat using Iris Pattern Analysis

2018

Master of Technology

GRIT: Novel Identification System of Goats using Retinal Imaging Technology

2020

15th July 2021

Subhranil Mustafi