Aniruddha Rakshit

Google Scholar | ResearchGate
Phone: +1 484-335-7277, | Email: arakshi1@binghamton.edu

EDUCATION

Ph.D. in Computer Science   August 2022 - Present
State University of New York at Binghamton
Researching Optimization algorithms in IoT and Edge deployment
Supervisor: Dr. Jayson Boubin

M.Sc. in Computer Science and Engineering   February 2017
Jahangirnagar University
Master's Thesis: Foggy Image Denoising Using Dark Channel Prior and Comparison
with Ground Truth Image
Supervisor: Dr. Shorif Uddin

B.Sc. in Computer Science and Engineering   January 2015
Jahangirnagar University
Undergraduate Thesis: Bengali Font Detection Using 1-D Wavelet Transform
Supervisor: Dr. Imdadul Islam

RESEARCH INTEREST

- Internet of Things
- Edge Computing
- Parallel Processing
- Agricultural IoT
- Deep Learning
- Computer Vision

SKILLS

- Python
- Docker
- yaml
- Kubernetes
- Tensorflow
- OpenCV
- C++

RESEARCH PROJECT:

Automatic Deployment Right-Sizing Tool for IoT and Edge   March 2022- Present
- Building optimized algorithm for diverse IoT and Edge devices as edge devices
  require

PUBLICATION

1 **Aniruddha Rakshit**, Jayson Boubin, "Poster: Automatic Deployment Right-Sizing Through Hyperparameter Optimization", Proceedings of the 8th ACM/IEEE Conference on Internet of Things Desing and Implementation (IoTDI 2023), pp. 438-439
   2023

2 Md Abdullah Al Noman, Md Shakil Hossen, Mirajul Islam, Jannatul Ferdous Ani, Nusrat Jahan Ria, **Aniruddha Rakshit**, "HYBRID-CNN: For Identification of Rohu Fish Disease", 13th International Conference on Computing, Communication and Networking Technologies (ICCCNT2022), 2022, pp. 1-6, 2022
   2022

3 Rubaiya Hafiz Upoma, Md. Reduanul Haque**, Aniruddha Rakshit**, Mohammad Shorif Uddin, "Image-based Soft Drink Type Classification and Dietary Assessment System Using Deep Convolutional Neural Network with Transfer Learning", Journal of King Saud University - Computer and Information Sciences, Volume 34, Issue 5, May 2022, pp. 1775-1784
   2022

4 Rashidul Hasan Hridoy, Fatema Akter, **Aniruddha Rakshit,** "Computer Vision Based Skin Disorder Recognition Using EfficientNet: A Transfer Learning Approach", The 10th International Conference on Information Technology (ICIT 2021), Amman, Jordan, pp. 482-487, doi: 10.1109/ICIT52682.2021.9491776.
   2021

5 Rashidul Hasan Hridoy, **Aniruddha Rakshit**, "BGCNN: A Computer Vision Approach to Recognize of Yellow Mosaic Disease for Black Gram", 4th International Conference on Computer Networks and Innovative Communication Technologies (ICCNCT2021), India, March 2021,
   2021

6 Foysal Ahmed, Abu Raihan Choudhury, **Aniruddha Rakshit**, Md. Zahid Hasan, "An IoT Based System for Printing Braille Letter from Speech", 2020 IEEE Region 10 Symposium (TENSYMP), Dhaka, Bangladesh, 2020, pp. 344-347, doi: 10.1109/TENSYMP50017.2020.9230734.
   2020

7 Mojibur Rahman, Redoy Md Akanda, Mohammad Masum Khandaker, Tushar Saha, Jahidul Haque, Anup Majumder, **Aniruddha Rakshit**, "Voice-Controlled Smart Assistant and Real-Time Vehicle Detection for Blind People", Advances in Electrical and Computer Technologies. Lecture Notes in Electrical Engineering, vol 672. Springer, 2020, https://doi.org/10.1007/978-981-15-5558-9_27.
   2020

8 Shakhawat Hossain, Md Zahid Hasan, **Aniruddha Rakshit**, "Processing with Patients' Statements: An Advanced Disease Diagnosis Technique", 2nd International Conference on Cyber Security and Computer Science (ICONCS2020), LNICST, vol 325. Springer, Cham. https://doi.org/10.1007/978-3-030-05286-0_29
   2020

9 Ashik Kumar Das, Md. Asif Iqbal, Bidhan Paul, **Aniruddha Rakshit**, Md. Zahid Hasan, "Classification of Succulent Plant using Convolutional Neural Network", 2nd International Conference on Cyber Security and Computer Science (ICONCS2020), LNICST, vol 325. Springer, Cham. https://doi.org/10.1007/978-3-030-52856-0_55
   2020

10 Md. Zahid Hasan, Md. Sazzadur Ahmed, **Aniruddha Rakshit**, K. M. Zubair Hasan, "Recognition of Jute Diseases by Leaf Image Classification Based on Convolutional Neural Network", 10th International Conference on Computing, Communication and Networking Technologies (ICCCNT2019),2019, pp. 1-5.
   2019

11 Faisal Bin Abul Kasem, Muhammad Ifte Khairul Islam, Rahnuma Islam Meem, **Aniruddha Rakshit**, Md. Tarek Habib, "Bangla Spell Checking and Correction Using Edit Distance" 1st International Conference on Advances in Science, Engineering and Robotics Technology (ICASERT-2019), May, 2019, pp. 1-4
   2019

12 Setu Basak, Md Mahbub Alam, **Aniruddha Rakshit**, Ahmed Al Marouf, Anup Majumder, "Predicting and Staging Chronic Kidney Disease of Diabetes (Type -2) Patient Using Machine Learning Algorithms", International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume 8, Issue 12, October 2019, pp. 206-209
   2019

WORK EXPERIENCE

Graduate Assistant   August 2022 - Present
State University of New York at Binghamton
- Building an optimized workload algorithm for IoT and edge devices
- Analyzing workloads performance based on goal and run time

Assistant Professor   February, 2022 – August, 2022
Daffodil International University
- Controlling Central Exam as Co-Convener
- Mentoring batch advising students
- Lecturing class, conducting exams

Senior Lecturer   February, 2019 – January, 2022
Daffodil International University
- Mentoring students as a batch advisor
- Making questions for midterm and final examination
- Supervision of final year projects.

Permanent Lecturer   January, 2016 – January, 2019
Daffodil International University
- Conducting class (15 credits) of different courses
- Managing midterm and final exam as a member of exam committee

Contractual Lecturer   September, 2015 – December, 2015
Daffodil International University
- Designing class lecture and lab materials
- Evaluation exam scripts and taking classes

EXTRA CURRICULAR ACTIVITIES

- Convenor of program design and management of International Joint Conferences on Advances in Computational Intelligence 2020 (IJCACI2020), Daffodil International University — November 2020
- Organized 22nd International Collegiate Programming Contest (ICPC) Dhaka Regional 2018 as a member of venue preparation committee — November 2018
- Worked as a member of "Badhan-A Blood Donation Group" in Jahangirnagar University — February 2010- December 2014
- Worked a member of "Notre Dame Nature Study Club" in Notre Notre Dame College — August 2008- December 2009