Saydul Akbar Murad Graduate Research Assistant at The University of Southern Mississippi Personal Website

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EDUCATION

Bachelor of Science in Information and Communication Engineering, 2020 Noakhali Science and Technology University, Bangladesh.

Master of Science in Faculty of Computing, 2023 (Last Semester) Universiti Malaysia Pahang, Malaysia.

Doctor of Philosophy in The School of Computer Science and Computer Engineering The University of Southern Mississippi, USA.

RESEARCH INTEREST

Machine Learning, Deep learning, and Cybersecurity.

PUBLISHED & ACCEPTED RESEARCHS

- Saydul Akbar Murad, Abu Jafar Md Muzahid, and Zafril Rizal Bin M Azmi "A Review on Job Scheduling Technique in Cloud Computing and Priority Rule Based Intelligent Framework" in JKSU - Computer and Information Sciences. (Published) (IF 8.839) (Citation 6)
- 2. Saydul Akbar Murad, ABU JAFAR MD MUZAHID and Apurba Adhikary "AI Powered Asthma Prediction Towards Treatment Formulation: An Android App Approach" in Intelligent Automation & Soft Computing. (Published) (IF 3.41)
- 3. Apurba Adhikary, Joy Bhuiya, Saydul Akbar Murad, Md. Bipul Hossain, K. M. Aslam Uddin, MD Estihad Faysal, Abidur Rahaman, Anupam Kumar Bairagi "Performance Evaluation of Micro Lens Arrays: Improvement of Light Intensity and Efficiency of White Organic Light-Emitting Diodes" in PLOS ONE. (Published) (IF 3.752)
- 4. Abu Jafar Md Muzahid, Syafiq Fauzi Bin Kamarulzaman, Dr Md Arafatur Rahman, Saydul Akbar Murad, Md Abdus Samad Kamal and Ali H Alenezi "Multiple Vehicle Cooperation and Collision Avoidance in Automated Vehicles: Survey and an AI-Enabled Conceptual Framework" in Scientific Reports. (Published) (IF 4.996)(Citation 6)

- 5. Nusrat Jahan Prottasha, Abdullah Sami, MD Kowsher, Saydul Akbar Murad, Anupam Kumar Bairagi, Mehedi Masud, and Mohammed Baz "Transfer Learning for Sentiment Analysis Using BERT Base Supervised Fine Tuning" in Sensors. (Published) (IF 3.847) (Citation 19).
- 6. Israt Jahan, K. M. Aslam Uddin, Saydul Akbar Murad, M. Saef Ullah Miah, Tanvir Zaman Khan, Mehedi Masud, Sultan Aljahdali, Anupam Kumar Bairagi "4D: a real time driver drowsiness detector using deep learning" in Electronics (Published) (IF 2.69).
- 7. Md. Kowsher, Anik Tahabilder, Saydul Akbar Murad "Impact learning: A Robust machine learning algorithm". In ACM Conference. (Published) (Best Paper Award) (Citation 19).
- 8. Saydul Akbar Murad, Zafril Rizal Bin M Azmi, Nusrat Jahan Prottasha, and Md Kowsher "Computer-aided system for extending the performance of diabetes analysis and prediction" is published at the conference of ICSECS 2021. (Published) (Citation 7)
- 9. Saydul Akbar Murad, ABU JAFAR MD MUZAHID, Zafril Rizal Bin M Azmi and Imran Sunny "Comparative study on job scheduling using priority rule and machine learning." in IEEE Conference 2021. (Published) (Citation 3)
- 10. Apurba Adhikary, Saydul Akbar Murad, Md. Shirajum Munir and Choong Seon Hong "Edge Assisted Crime Prediction and Evaluation Framework for Machine Learning Algorithms" 2022 International Conference on Information Networking (ICOIN). (Citation 5) (Published)
- 11. Md Shamimul Islam, Md Mahedi Hasan, Sohaib Abdullah, Jalal Uddin Md Akbar, N H M Arafat, Saydul Akbar Murad "A deep Spatio-temporal network for vision-based sexual harassment detection" in IEEE Conference 2021. (Published) (Citation 3)
- 12. ABU JAFAR MD MUZAHID, Md. Abdur Rahim, Saydul Akbar Murad, Syafiq Fauzi Kamrulzaman and Md Arafatur Rahman "Optimal Safety Planning and driving Decision-Making for Multiple Autonomous Vehicles: A learning Based Approach" in IEEE Conference 2021. (Published) (Citation 5)
- 13. N H M Arafat, Md Ileas Pramanik, Abu Jafar Md Muzahid, Bibo Lu, Sumaiya Jahan and Saydul Akbar Murad "A Conceptual Anonymity Model to Ensure Privacy for Sensitive Network Data" in IEEE Conference 2021. (Published) (Citation 4)
- 14. Saydul Akbar Murad, Nick Rahimi, Indranil Roy, and Bidyut Gupta. "Design of a New Secured Hierarchical Peer-to-Peer Fog Architecture Based on Linear Diophantine Equation." 38th International Conference on Computers 2023. (Published)
- 15. Nusrat Jahan Prottasha, Saydul Akbar Murad, Abu Jafar Md Muzahid and Md. Kowsher "A training-based algorithm for machine learning: Impact Learning" in Journal of Computational Science. (Accepted)

- 1. Saydul Akbar Murad, Zafril Rizal M Azmi, Abu Jafar Md Muzahid, Md. Murad Hossain Sarker and M.Saef Ullah Miah "A New Priority Rule Cloud Scheduling Technique that Utilizes Gaps to Increase the Efficiency of Job Distribution" in IEEE Transactions on Parallel and Distributed Systems.
- 2. Saydul Akbar Murad, Zafril Rizal M Azmi and Arman Hossain "SG-PBFS: Shortest Gap-Priority Based Fair Scheduling Technique for Job Scheduling in Cloud Environment" in Future Generation Computer System.
- 3. Saydul Akbar Murad, Apurba Adhikary, Anupam Kumar Bairagi, Bipul Hossain "An Automated System to maintain the departmental activities: An android Application" in the journal of Softwarex. (Preprint Available)
- **4.** Mizanur Rahman, Sajib Debnath, **Saydul Akbar Murad**, Abu Jafar Md Muzahid, Apurba Adhikary, and Anupam Kumar Bairagi, "**Machine Learning-based summary extraction for Bangla text**" in Big Data and Cognitive Computing.

RESEARCH PROJECT

1. Job Scheduling Technique in Cloud Computing

Proposed a priority-based Job Scheduling technique for cloud computing. Where the backfilling techniques had been utilized. Published a review article in Elsevier journal with high impact factor and two other experiment papers are in under review.

2. Asthma Prediction (Android App Dev)

Assisted and performed research to develop a socially intelligent app to make prediction and treatment formulation systems for asthma. Researched, designed, and implemented a machine learning approach for error avoidance during task execution.

3. StudentInfo

A native android application developed by using java for adding notice, course details, students' details, to take attendance, semester result, parents comment etc. https://github.com/Mmurrad/StudentInfo

4. Impact learning Implementation

Impact Learning is a robust machine learning algorithm, which is being used widely to achieve more advanced results on many machine-learning related challenges. Impact learning is a supervised machine learning algorithm for resolving classification and linear or non-linear regression knowledge from examples. To install in your machine learning environment just command **pip installs impact learning**.

5. Order for Item

This app is developed by using java for taking order item from the customer, review for item, total transition of a month etc. https://github.com/Mmurrad/RestaurantApps

6. City Guide

This app is developed to give the total information about a city. If the user uses this app, he has no need to take any help of others. https://github.com/Mmurrad/CityGuide

7. Current location

This app is developed to give the location name and total distance you have passed. It will help the people who do exercise regularly. https://github.com/Mmurrad/CurrentLocation

8. Smart Man

It is online based app. It's stored the data of man. This app helps the person who has a lot of clients and needs their information store.

JOB EXPERIENCE

Graduate Research Assistant

January 2023 – Present

School of Computer Science and Computer Engineering, The University of Southern Mississippi, USA. Working as a research assistant in a Cybersecurity lab. My research topic is Machine learning in Cybersecurity.

Graduate Research Assistant

February 2021 – October 2022

Faculty of Computing, Universiti Malaysia Pahang. Working as a research assistant in a networking lab. My research topic is a new priority algorithm for job scheduling at cloud computing.

Adjunct Faculty

August 2022 - November 2022

Electronics and Telecommunication Engineering, International Islamic University Chittagong. Here, I am taking classes on Database management system (DBMS).

Lecturer

February 2020 – January 2021

Department of Information and Communication Technology, National Model College, Noakhali, Bangladesh. Here I take the class on Programming, Database Management systems, Data Communication.

Industrial Trainee

February 2019 – March 2019

BTCL Nandankanon, Chittagong branch. Industrial training at BTCL gives me an idea about how to deal with corporate life and knowledge about Telephone Line Connection, Optical fiber communication, structure, etc.

TECHNICAL SKILL

❖ Simulator : CloudSim.

❖ Programming language : C, C++, Java, Python.

❖ Database : MySQL

❖ IDE : Spyder, Colab, Jupyter Notebook, Code Blocks, Dev-C++, PyCharm.

- ❖ Have strong knowledge in android app development with java.
- ❖ Have strong knowledge in Machine learning with python.
- Proficient in Latex.

REVIEWER

- ❖ IEEE Access
- ❖ Journal of Experimental & Theoretical Artificial Intelligence
- ❖ IEEE Conference on Applied Intelligence and Computing (AIC 2022)
- ❖ 4th International Conference on Communication and Intelligent Systems

AWARDS AND ACHIVEMENTS

- ❖ Best Publication Award, University Malaysia Pahang, 2023
- ❖ Best Research Paper Award in the 9th International Conference on Computer and Communications Management, ACM, 2020
- ❖ 3rd Place at NSTU Intra University Programming Contest 2016.
- ❖ SUB Inter-University Programming Contest-2018 (Rank 6).
- LU Inter-University Programming Contest-2017 (Rank 11).
- ❖ Best Final Year Project Supervised by Apurba Adhikari, 2019.

PROFESSIONAL TRAINING

- * Research writing skill, EMK Center (2021)
- **❖ Data Science with Python (Part 1),** Maker Lab, EMK Center (2020)
- **❖ Data Science with Python (Part 2),** Maker Lab, EMK Center (2020)
- ❖ Android Application Development- Java, SEIP under Basis Institute of Technology and Management (2019)
- **❖** Android Application Development, LICT, Bangladesh (2016)

WORKSHOPS AND PRESENTATIONS

- ❖ Oral Presentation, at 2021 Emerging Technology in Computing, Communication, and Electronics (ETCCE), Dhaka, Bangladesh.
- ❖ Oral Presentation, at 7th INTERNATIONAL CONFERENCE ON SOFTWARE ENGINEERING & COMPUTER SYSTEM (ICSECS − 2021), UMP, Pahang, Malaysia.
- ❖ oral presentation, seminar on "In-Depth of Artificial Intelligence & Machine Learning" at Department of Information and Communication Engineering, NSTU, Noakhali, 15 March, 2020.
- ❖ Workshops Research and Academic Career. Conducted by UniV Summer School (Three weeklong workshops.