

## SDG AT AIUB

American International University-Bangladesh (AIUB) is committed to achieve the United Nations 17 Sustainable Development Goals through different initiatives. These reports outline year-long different activities, such as research & publications, enhancing social inclusion, encouraging environmental sustainability, partnerships, good governance, and diversity among students and employees as well as its associated mapping to different SDGs.



## American International University-Bangladesh (AIUB)

### SDG Activity Report - 2022

# SDG 10: Reduced Inequalities



# AIUB SDG Activity Report 2022

## SDG 10: Reduced Inequalities

American International University-Bangladesh (AIUB) is unwavering in its commitment to Sustainable Development Goal 10: Reduced Inequalities, and this commitment is reflected in a spectrum of university activities and faculty research initiatives that champion inclusivity and diversity.

The university's activities extend beyond academic pursuits, fostering a sense of community and understanding. The "Meet n' Greet for the Freshers - Fall 2022-2023" organized by the Faculty of Business Administration (FBA) exemplifies AIUB's dedication to creating a welcoming environment for all students, promoting a culture where everyone feels valued and included from the very beginning of their academic journey.

AIUB's initiatives go beyond the campus boundaries, as showcased by the "Law Students visited Dhaka Judge Court." This activity not only provides students with practical exposure to legal proceedings but also emphasizes the importance of equal access to justice, bridging the gap between theoretical knowledge and real-world application.

Addressing the growing concern of cyber threats, AIUB has organized events like the "Drama on Cyber Security and Internet Fraud" and seminars on "Safe Internet for Academic Excellence" and "Cyber Security & Social Awareness." These initiatives contribute to reducing inequalities by raising awareness and equipping students with the knowledge and skills needed to navigate the digital landscape safely, irrespective of their background or familiarity with technology.

AIUB's commitment to social welfare is evident in the activities conducted by the AIUB Social Welfare Club – "Shomoy." The initiative "Standing with the Flood-Affected 2022" showcases the university's dedication to supporting marginalized communities during challenging times. The campaign "Oder Eid, Amader Khushi" further underscores the spirit of inclusivity, fostering a sense of shared joy and celebration.

The AIUB Oratory Club (AOC) achieving victory in the ATN BANGLA DEBATE FOR DEMOCRACY 2022 is a testament to the university's efforts in nurturing communication skills and providing a platform for students from diverse backgrounds to express their perspectives. Such achievements contribute to breaking down barriers and promoting equality in the realm of public discourse.

On the faculty front, AIUB's research initiatives actively engage with issues of inequality and social relevance. Research papers like "An In Situ Electrical Impedance Tomography Sensor System for Biomass Estimation of Tap Roots" and "Deep-bert: Transfer learning based deep learning model for classifying multilingual offensive texts on social media" delve into areas that have practical implications for addressing societal challenges.

In conclusion, AIUB's multifaceted approach to SDG 10 demonstrates a holistic commitment to fostering an inclusive environment on campus, addressing societal issues, and producing research that contributes to reducing inequalities. Through a blend of university activities and faculty research initiatives, AIUB stands as a beacon for promoting diversity, understanding, and equal opportunities within its academic community and beyond.

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## University Activities

### Drama on “Cyber Security and Internet Fraud” by FBA

The Department of Management Information Systems, Faculty of Business Administration FBA has arranged a drama on “Cyber Security and Internet Fraud” which took place on 13th December 2022 in Media Studio, Annex 2 at 3:30-5:00 pm and students who enrolled in “Cyber Security” course were the participants. Ms. Nazia Farhana, the course teacher of this course coordinated, and guided the students for the drama. All students of FBA were invited to enjoy the program. The drama served as a learning session on issues of cybersecurity as well as entertained the audience. A total of three shows were staged by the students, the scripts of which were written by the students themselves. This helped the students to understand the overall concepts of cybersecurity and enriched their social communication skill. This event raised self-confidence among the participants, fostered their creativity, improved their verbal and nonverbal communication skills, and encouraged cooperation and teamwork. It also increased cyber security awareness among the FBA community. The drama covered all the important topics related to cybersecurity, for example, the reasons for being hacked, the processes hackers may use to steal the information of the victims, and how a victim may become cautious of such attacks. Dr. Nisar Ahmed, Treasurer, Dr. Rezbin Nahar, Ms. Samia Shabnaz, Ms. Shahanaz Zarin Haque, Mr. Mehzabul Haque Nahid, Ms. Tamna Nazneen Rahman and Ms. Azmery Sultana were present during the program.



## FBA, AIUB Organizes Meet n' Greet for the Freshers - Fall 2022-2023

The Faculty of Business Administration (FBA), AIUB, organized an interactive session entitled "Meet n' Greet - the FBA Family" for the BBA Freshmen Students of the Fall 2022-2023 Semester on Wednesday, October 19, 2022, held at the Multi-purpose Hall, Building D. The program was attended by the BBA Freshmen students, the faculty members, the Department Heads and representatives, and the Undergraduate and Graduate Program Directors, FBA. The program's objective was to welcome and have an information-sharing session for the BBA Freshmen Students of this ongoing semester. The session commenced with a welcome speech by Prof. Dr. Nisar Ahmed, Director of the Graduate Program, FBA, followed by inspirational remarks by Prof. Dr. Farheen Hassan, Director of the Undergraduate Program, FBA. The speakers welcomed the students to AIUB and motivated them to excel in their tenure of studies and adore the serenity of the beautiful AIUB campus.

The emcee of the program, Ms. Shahnaz Zarin Haque, Assistant Professor, Dept. of OSCM, FBA, further carried out the session by giving a synopsis of the session. After the introductory discussion, Dr. Mohammad Faridul Alam, Head, Dept. of Accounting, briefly explained the various FBA degree programs and other academic issues. The session continued with a discussion of the different student-based activities informed by Dr. Khondaker Sazzadul Karim, Head, Dept. of Marketing and THM. The session ended with a lively dance and song performances by the members of the AIUB Performing Arts Club (APAC). The students actively participated and enjoyed the overall arrangements. The FBA, AIUB, is especially thankful to the AIUB Management, Administration, and Office of Student Affairs (OSA) for their support in arranging the session successfully.



## Law Students visited Dhaka Judge Court

On November 23, 2022, the AIUB Department of Law arranged a study tour to the Dhaka Judge Court to gain and enhance their legal and practical knowledge on "Trial Procedure of Civil Courts." A delegation of 40 AIUB law students and a faculty member attended the court. The team left the Permanent campus in Kuril at 7:30 a.m. and arrived at the court about 8:30 a.m.

Mr. Jakir Hossain, Senior Assistant Judge, Savar Court, Dhaka welcomed the AIUB law students on behalf of the Dhaka Judgeship. Following the welcome, the briefing session began at the 09:30 am. Mr. Jakir Hossain delivered a brief on the importance of civil judiciary focusing on the use of evidence in the trial. He underlined the need of appropriate methods of service of summons for civil suits. Following the briefing, the Honorable Senior Assistant Judge answered students' questions on a variety of professional, legal, and practical issues.

Following the initial briefing, students took their seats in the courtroom. In real life, students learned and experienced filing a civil suit, trial session, examination and cross examination of witnesses, methods of service of summons, and so on. After the courtroom experience, there was a QA session. Mr. Jakir Hossain answered the queries raised by the students and provided legal explanations. Altogether this real-life practical learning experience lasted for four hours covering introductory session, trial session and QA session. Later, students were allowed to see the Dhaka Judge Court compound. The visit concluded with a group photo with Mr. Jakir Hossain in front of his court room. The trip was incredibly relevant, instructive, helpful, and beneficial for AIUB Law students.



## Seminar on Safe Internet for Academic Excellence

A seminar on “Safe Internet for Academic Excellence” was arranged by Internet Service Provider Association of Bangladesh (ISPAB) and the Computer Science Department, AIUB in association with the AIUB Computer Club (ACC) on Tuesday, 8 November 2022. Mr. Mustafa Jabbar, Honorable Minister, Post Telecommunications Division, Ministry of Post, Telecommunication and Information Technology was present as the Chief Guest. Mr. Ishtiaque Abedin, Founder member and Chairman, AIUB Board of Trustees, Dr. Hasanul A. Hasan, Founder Member, AIUB Board of Trustees, Dr. Carmen Z. Lamagna, Vice Chancellor, AIUB and Ms. Shania Mahia Abedin, Member, AIUB Board of Trustees received the honorable minister at the AIUB Campus.

The seminar took place in the AIUB Auditorium. Dr. Carmen Z. Lamagna, Vice Chancellor, AIUB presided over the program. Md. Emdadul Hoque, President, ISPAB and Director and COO, Optimax Communication Limited; Mr. Sakif Ahmed, Director, ISPAB and Director and CEO, InfoLink Ltd., Mr. Nazmul Karim Bhuiyan, Secretary General, ISPAB and Managing Director, KS Network Ltd.; and Mr. Iqbal Bahar Zahid Founder and President, Nijer Bolar Moto Ekta Golpo were present as special guests.

Prof. Dr. A B M. Siddique Hossain, Honorable Dean, Faculty of Engineering, AIUB delivered the welcome speech where he highlighted the need of incorporating topics like data science, AI, robotics, block chain, etc. in the curriculum. Later the special guests, Mr. Iqbal Bahar Zahid, Mr. Sakif Ahmed, Mr. Nazmul Karim Bhuiyan, Mr. Emdadul Haque delivered their speeches where they shared their experiences, future plans of ISPAB, discussed on the current condition of internet services, cost and speed in the country. They also talked about highlighted how ISPs are contributing to the digital growth of the country.

The chief guest and honorable minister, Mr. Mustafa Jabbar, in his valuable speech, started by sharing the story of Bijoy keyboard innovation. He also mentioned about "Mr. Hanif Uddin", the first Bangladeshi computer programmer. He further discussed about the Digital Bangladesh, the Bangabandhu Satellite, progression of 1G, 2G, 3G, 4G, 5G network in Bangladesh, two-step verification and internet security condition in the country. At the conclusion of the session, Dr. Carmen Z. Lamagna, Honorable Vice Chancellor of AIUB expressed her valuable thoughts about safe internet for the world and also thanked the organizers and the chief guest for being present in such a valuable seminar. At the end of the seminar, Dr. Carmen handed over crests and gift packs to the guests.



### ACC organized seminar on Cyber Security & Social Awareness

On 12th October 2022, in the month of Cyber Security Awareness, a seminar named “Cyber Security & Social Awareness Program 2022”, was conducted by Carrer Pro BD, a Training and Development organization in collaboration with the AIUB Computer Club. The event was titled “It’s Easy to Stay Safe Online”. The event partners were FOGG, Pepsi, GLOBAL VISION, DigiFix, Ahmed, and AIUB Computer Club. The media partners were BANGLA VISION, Kalbela, and SHADHIN 92.4 FM. Objectives of the program were creating more awareness about Cyber Security, clearing up confusion regarding Cyber Security and evaluating the importance and necessity of Cyber Security in modern world. The event was sectionized into several key sections. With the motto of fulfilling the objectives of the program three panelists Aklima Yeasmin, General Manager, HR & Administration, R-PAC International, Jahanara Akhter Shinu, HR Business Partner, Bestseller, and Md. Fazle Farazee, Senior Manager (Head of HR), Corporate HR Department, Esquire Electronics Limited took the floor to educate the audience about the fundamentals of Cyber Security, the importance of it and the way of achieving the security. Ms. Yeasmin started her part by giving a brief overview of today’s world. She said that everything is going to be engulfed in the virtual world in near future. Then she talked about the importance of data management in business planning and continuity. Afterward, Ms. Shinu talked about the ratio of various communication platforms people use and highlighted that 70% of the time people communicate through emails. She also gave some ideas about policy in cyberspace, the code of ethics, and data ethics. After that, Mr. Farazee uttered some valuable awareness policies of cyberspace. He talked about the relevance of maintaining password and never sharing it. Later, he gave a broad overview of data security, precautions against hacking, employee awareness, and need of saving data every 15 days. Ms. Yeasmin articulated to stay away from using free Wi-Fi and third-party cyber security control applications and programs. Later, Ms. Shinu also advised the audience not to share CVs from CV banks. Their session of speech ended by the awareness quote of Ms. Shinu. She ended the session by saying “Stop, Think & then Click”. The host of the event, Ms. Biswas addressed the second session speakers and guests Touhidul Islam Khan Shoikot, Deputy Director at Bangladesh Bank, and Tanwita Ghosh, Consultant, Psychotherapy & Counselling, Bangladesh Psychiatric Care Ltd (BPCL). Mr. Shoikot evaluated the importance of cyber security in his speech. He also talked about the legitimate process of having help in solving one’s cybersecurity-related issue. He talked about the necessities and tackling cybercrime. He introduced the audience how fast the cyber security concern is growing in modern world. The second speaker Ms. Ghosh conveyed the health awareness for both physical, mental health. She also talked about the relationship among biological, social, and psychological aspects which work as a stabilizer for mental health. During the sessions a small quiz contest was arranged and that made the event more engaging for the participants. The participants who became the winner were awarded with gift hampers. All the speakers welcomed questions from the participants and a good number of responses were received from the audience. At the end of the seminar, Abhijit Bhowmik, Associate Professor and Special Asst., Office of Student Affairs, AIUB, talked about his view on cyber security awareness and its importance. Mr. Bhowmik thanked the organizers, media partners, and guests to make this awareness program happen. Later, he handed over some token of appreciations to the guests and organizers. Over 200 participants were present in the event and made the event successful.





## Down Syndrome Awareness Month Celebrated at AIUB

On Thursday, October 20, 2022, the Department of Public Health, American International University-Bangladesh (AIUB) and the Down Syndrome Society of Bangladesh (DSSB) jointly celebrated October Down Syndrome Awareness Month at the AIUB Campus with an aim of increasing awareness on this issue. Dr. Carmen Z Lamagna, Vice Chancellor of AIUB was present as the Chief Guest and inaugurated the program with colorful rally inside the campus, which was attended by special children with down syndrome, officials of DSSB, students, faculty members, department heads, directors, deans, officials of AIUB. Prof. Dr. Tajul Islam, Dean, Faculty of Arts and Social Sciences (FASS), AIUB delivered the welcome address. Honorable Ambassador of Royal Netherlands Embassy in Bangladesh H.E Annie Van Leeuwen attended the seminar as the Guest of Honour. He said, Down syndrome is an important issue. Like the rest of the world, the number of people with Down syndrome is increasing day by day in Bangladesh. Their rehabilitation and inclusion are the need of the hour. Honorable Vice Chancellor of AIUB Dr. Carmen Z. Lamagna, in her speech of the chief guest, said that this kind of celebration in the campus is very significant and will play a very important role in creating awareness among the university students. It is our responsibility to provide all possible support, benefits, opportunities, strength to the Down syndrome-affected children for them to be an active part of the society. Mr. Sardar A Razzak, the Chairman of Down Syndrome Society of Bangladesh, presented the keynote speech in the seminar. The theme of this year's awareness month is #InclusionMeans. The main goal of this awareness month is to ensure the inclusion and participation of the underprivileged people with Down syndrome at all levels of society.



## World Mental Health Day 2022 celebration and introducing wEvolve at AIUB

On the occasion of the World Mental Health Day 2022, commemorating the importance of making one's mental well-being a priority, the American International University - Bangladesh (AIUB) organized a rally on its campus with its students, faculties, and officials on Monday, 10 October 2022. Dr. Carmen Z. Lamagna, Vice Chancellor, AIUB and Ms. Nadia Anwar, Founder Member, Board of Trustees, AIUB, inaugurated and participated in the rally around the campus, adorned with hand-painted placards prepared by the AIUB Arts Club (AAC), showcasing creative messages to spread awareness on mental health. Deans, Associate Deans, Directors, Department Heads, faculties, student club members, and general students all joined the program.

Ms. Nadia Anwar announced the introduction of professional mental health services at AIUB for its students and staff, in collaboration with wEvolve. wEvolve is a holistic organization geared towards promoting, enabling, and improving mental health for all those who are struggling alone. In this day and age, when we deal with so many complexities even at a young age, seeking expert counseling when in need should no longer be a stigma and that is precisely the narrative that AIUB and wEvolve is attempting to change.

To celebrate the day, a concert was also organized at the campus' amphitheater, where the AIUB Performing Arts Club (APAC) put on musical performances on some popular numbers. An alumnus of AIUB's Mass Communication and Media (MMC) Department, one of the country's renowned musicians, Minar Rahman also put on an incredible performance for the crowd. Amidst all the hustle-bustle of classes and coursework, the event served as a break for students and staff to make their mental well-being a priority moving forward.



## AIUB Social Welfare Club – “Shomoy”: “Standing with the Flood-Effectuated 2022”

Natural disasters rob us of our sense of control in the world, rendering us helpless to its chaos and leaving us to pick up the pieces that lie in its wake. But just as rain turn into floods, one drop at a time, while alone, we may be drops of water, but together, we can form an ocean. And it is at times of such tragedy and turmoil, that we re-find hope in mankind.

This year, record-breaking rainfall causing a flash flood in upstream Meghalaya and Assam areas of India, followed by torrential rainfall in the north-eastern districts of Bangladesh lead to more 70% of the Sylhet division being submerged, marooning around 40 lakh people in several upazilas. But within days, various voluntary and charitable organizations came forward to aid in the recovery and restoration of the flood-affected regions. From UNICEF, United Kingdom, European Commission, Prime Minister’s Office, and several other local organizations and individuals, everyone did whatever they could to lend a helping hand and overcome the unprecedented calamity. And the American International University – Bangladesh (AIUB) takes pride in the fact that the AIUB Social Welfare Club – Shomoy, a voluntary student organization working towards social development, took an initiative to run a fund-raising campaign to support the cause. After a week-long campaign, donations from students and staff enabled the club to distribute relief packages of flattened rice, puffed rice, molasses, dates, first-aid medication, saline, sanitary pads, candles, lighters, water, and polythene packets, to over 260 households in need, with the help of local authorities, on the 29th of June 2022, across the flood-affected areas of Moghla Bazar in Sylhet.

In such dire circumstances, every bit of contribution plays a valuable role in getting through the calamity, rising above, and persevering to rebuild a better tomorrow, and the university and its student community hopes to continue doing that and serving the greater good.



## “Oder Eid, Amader Khushi” Campaign 2022 by Shomoy Club

Albert Einstein once said, “Those who have the privilege to know have the duty to act.” Because we may not be able to help everyone, but everyone can help someone. It is with that very notion, like every year, even throughout the pandemic, the AIUB Social Welfare Club – Shomoy, arranged their annual flagship fund-raising campaign for underprivileged children, “Oder Eid, Amader Khushi (Their Eid, Our Happiness) 2022”. Eid-UI-Fitr is one of the major religious festivals for the Muslim community, but it is also an occasion that creates numerous childhood memories that are cherished for life. Due to their financial constraints, many struggling with poverty, is unable to celebrate the occasion of Eid. So, this year, students, faculty members, administrative officials, and the management of the American International University – Bangladesh (AIUB) came together and contributed around 2,00,000 BDT towards the noble cause. On the 29th of April 2022, the AIUB Shomoy Club distributed Eid rations like rice, oil, onions, potatoes, salt, sugar, spices, vermicelli, milk, etc. that are the basic requirements for traditional meals prepared by Muslim households for their families during the auspicious festival. As a result, over 200 students of ‘Kathpencil Pathshala’, a school for underprivileged children in the Tejgaon area, along with their families truly enjoyed and commemorated the joy and spirit of Eid. In that light, moving forward, everyone at the university hopes to continue sharing the blessings, seeking forgiveness, and easing the suffering of all, together.



## AIUB ORATORY CLUB (AOC) WON THE ATN BANGLA DEBATE FOR DEMOCRACY 2022

On the 19th of February 2022, the AIUB Oratory Club (AOC) participated in the ATN Bangla Debate for Democracy Final at the Bangladesh Film Development Corporation (BFDC), Dhaka. Defeating 4 teams, AOC emerged as the Champion in the rigorous competition. The opposition team in the final round was from Stamford University. AOC was assigned to debate in favor of the government for the motion. The debate program was moderated by Mr. Hasan Ahmed Chowdhury Kiron, the Chairman, Debate for Democracy as the speaker for the program, and Dr. Debapriya Bhattacharya, Founder Executive Director of Centre for Policy Dialogue (CPD) graced the occasion as the chief guest.

The topic of the debate was, “আর্থিক খাতের শৃঙ্খলা রক্ষায় সরকারের সদিচ্ছার ঘাটতি নেই” The participating debaters from AOC were, Tasaddicul Naim, Tuhalika Saha, Sumaiya Binte Zilani Chowa, and Ahasun Ullah Riaz from the Faculty of Science & Technology, along with Ishtiaque Ahmed Badhon from the Faculty of Business Administration.

Such mock-parliament sessions are some of the most updated versions of modern parliamentary debate that encourages and enables young talented debaters to enhance their oratory skills. This is one of AOC’s biggest achievements till date as their second win in a national television debate tournament, bringing great pride to the club and the university.



## Faculty Research and Publication

### An In Situ Electrical Impedance Tomography Sensor System for Biomass Estimation of Tap Roots

Author: DR. RINKU BASAK et al.

#### Brief Description:

Root biomass is one of the most relevant root parameters for studies of plant response to environmental change. In this work, a dynamic and adjustable electrode array sensor system is designed for developing a cost-effective, high-speed data acquisition system based on electrical impedance tomography (EIT). The developed EIT system is found to be suitable for in situ measurements and capable of monitoring the changes in root growth and development with three-dimensional imaging by measuring impedances in multiple frequencies with the help of an EIT sensor. The designed EIT sensor system is assessed and calibrated by the inhomogeneities in both water and soil media. The impedances are measured for multiple tap roots using an electrical impedance spectroscopy (EIS) tool connected to the sensor at frequencies ranging from 1 kHz to 100 kHz. The changes in conductivity are calculated by obtaining the boundary voltages from the measured impedances for a given stimulation current. A non-invasive imaging method is utilized, and the spectral changes are observed accordingly to evaluate the growth of the roots. A further root analysis helps us estimate the root biomass non-destructively in real-time. The root size (such as, weight, length) is correlated with the measured impedances. A regression analysis is performed using the least square method, and more than 97% correlation is found for the biomass estimation of carrot roots with an RMSE of 4.516. The obtained models are later validated using a new and separate set of carrot root samples and the accuracy of the predicted models is found to be 93% or above. A complete electrode model is utilized, and the reconstruction analysis is performed and optimized by utilizing the impedance imaging technique in difference method. The tomography of the root is reconstructed with finite element method (FEM) modeling considering one-step Gauss–Newton (GN) algorithm which is carried out using an open source software known as electrical impedance and diffuse optical tomography reconstruction software (EIDORS).

Source: <https://doi.org/10.3390/plants11131713>

### A Heuristic Approach for Analyzing Some Reading Behaviors of Online News Viewers Using RF and KNN

Author: DR. MD. MANZURUL HASAN et al.

#### Brief Description:

This paper focuses on the factors that motivate readers to get their news online by analyzing readers' reading behaviors. It sheds light on the variety of electronic press media, especially on

various online news hubs. We have gathered several opinions regarding reading news online. We use the K-nearest neighbor (KNN) algorithm and the random forest (RF) algorithm for the analysis [1, 13]. In addition, a heuristic approach is hereby unveiled to analyze the activities of online news viewers. As a result, we find some factors that influenced the readers most to read news online, which assist the news agencies in understanding how newsreaders are behaving on online news platforms. Furthermore, we have results on the relative contributions, which show that these models are more accurate in predicting the factors inspiring the readers to surf news online than that of no existing one to the best of our knowledge. Additionally, as far as observed in previous literature, our paper have directed a new path on the subject matter besides some mentionable results.

Source: [https://link.springer.com/chapter/10.1007/978-981-16-8826-3\\_1](https://link.springer.com/chapter/10.1007/978-981-16-8826-3_1)

### [A Rapid, Low-Cost, and High-Precision Multifrequency Electrical Impedance Tomography Data Acquisition System for Plant Phenotyping](#)

Author: DR. RINKU BASAK et al.

#### Brief Description:

Plant phenotyping plays an important role for the thorough assessment of plant traits such as growth, development, and physiological processes with the target of achieving higher crop yields by the proper crop management. The assessment can be done by utilizing two- and three-dimensional image reconstructions of the inhomogeneities. The quality of the reconstructed image is required to maintain a high accuracy and a good resolution, and it is desirable to reconstruct the images with the lowest possible noise. In this work, an electrical impedance tomography (EIT) data acquisition system is developed for the reconstruction and evaluation of the inhomogeneities by utilizing a non-destructive method. A high-precision EIT system is developed by designing an electrode array sensor using a cylindrical domain for the measurements in different planes. Different edible plant slices along with multiple plant roots are taken in the EIT domain to assess and calibrate the system, and their reconstructed results are evaluated by utilizing an impedance imaging technique. A non-invasive imaging is carried out in multiple frequencies by utilizing a difference method of reconstruction. The performance and accuracy of the EIT system are evaluated by measuring impedances between 1 and 100 kHz using a low-cost and rapid electrical impedance spectroscopy (EIS) tool connected to the sensor. A finite element method (FEM) modeling is utilized for image reconstruction, which is carried out using electrical impedance and diffuse optical tomography reconstruction software (EIDORS). The reconstruction is made successfully with the optimized results obtained using Gauss–Newton (GN) algorithms.

Source: <https://doi.org/10.3390/rs14133214>

### Deep-bert: Transfer learning based deep learning model for classifying multilingual offensive texts on social media

Author: DR. KAMRUDDIN MD. NUR et al.

#### Brief Description:

Offensive messages on social media, have recently been frequently used to harass and criticize people. In recent studies, many promising algorithms have been developed to identify offensive texts. Most algorithms analyze text in a unidirectional manner, where a bidirectional method can maximize performance results and capture semantic and contextual information in sentences. In addition, there are many separate models for identifying offensive texts based on monolingual and multilingual, but there are a few models that can detect both monolingual and multilingual-based offensive texts. In this study, a detection system has been developed for both monolingual and multilingual offensive texts by combining deep convolutional neural network and bidirectional encoder representations from transformers (Deep-BERT) to identify offensive posts on social media that are used to harass others. This paper explores a variety of ways to deal with multilingualism, including collaborative multilingual and translation-based approaches. Then, the Deep-BERT is tested on the Bengali and English datasets, including the different bidirectional encoder representations from transformers (BERT) pre-trained word-embedding techniques, and found that the proposed Deep-BERT's efficacy outperformed all existing offensive text classification algorithms reaching an accuracy of 91.83%. The proposed model is a state-of-the-art model that can classify both monolingual-based and multilingual-based offensive texts.

Source: <https://www.techscience.com/csse/v44n2/48287>

### COVID-19 and Sustainable Development Goals: Bangladesh Perspective

Author: MD. MORTUZA AHMMED et al.

#### Brief Description:

The objective of this study is to evaluate the state of the Sustainable Development Goals (SDGs) in Bangladesh before the arrival of COVID-19 along with its apparent impact on the accomplishment of SDGs in the future. Data from several national and international sources have been utilised to serve the analytical purpose of the study. Obliteration of the commendable accomplishments regarding some of the SDGs so far and resetting of the goals in terms of precedence are going to be the main consequences of COVID-19 concerning SDGs in Bangladesh which would impede attaining SDGs. However, constrictions in the production of industries along with a massive drop in fossil fuel usage through vehicles would give some respite to nature leading to notable progress regarding SDG 13, SDG 14 and SDG 15. But it would never recompense significantly for the overall effect resulting from COVID-19.

Source: <https://www.inderscience.com/info/inarticle.php?artid=125098>



## Love as Water: Environmental Ethics in Ponyo and The Shape of Water

Author: SHIBAJI MRIDHA et al.

### Brief Description:

Analyzing two films, Ponyo by Hayao Miyazaki and The Shape of Water by Guillermo del Toro, this paper studies the portrayal of humanity's complex relationship with water that refuses to present itself as static, simple, and reducible. Attending to water as a dynamic entity, it investigates the dynamics of value and agency of water in its manifested ally, rebel, and love. Engaging in the discussion of reciprocity as a way forward to a world of harmony, the paper argues how water as an equalizer can inform humans to shun their anthropocentric hubris and can help recognize the shared materiality between the human and the non-human world. Drawing on references from the recent scholarship on elemental ecocriticism, material ecocriticism, and environmental ethics, the eco-aesthetics of the films will be studied to evoke an ethical position about water's fluidity and omnipresence that demand our respect and our recognition of the agency of the non-human world.

Source: <https://deh.ulab.edu.bd/publications/crossings/crossings-archive/2022-vol-13-no-2/mridha>