



UNITED
INTERNATIONAL
UNIVERSITY

Sustainability Report 2023





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Ensuring students' healthy lives in the campus is our all-out sincere concern and attention, and we make it possible by making the campus environment-healthy, we kept 40% space of the building open surrounded by two large playgrounds. We have adequate indoor games facilities, prayer rooms along with sufficient supply of safe drinking water to support an environment of well being for the students and the staff.

Furthermore, hygiene and sanitation levels are quite satisfactory. Medical doctor's service is available to all concerned in this campus. Counseling by each and every faculty member is ensured as part of a holistic education system. Co-Curricular social and cultural activities are promoted for the students through various student clubs.

Our scholarship program relieves the financial burden of the students contributing to their overall well being. UIU is a non-smoking campus.

UIU focuses on research and policy advocacy to serve all strata of people in the society as well as the underprivileged to ensure and promote well being for all.

There's an extensive range of projects, facilitated through partnerships with healthcare service providers and NGOs, that bring greater levels of access to healthcare services for those with limited resources.

The AIMS Lab at UIU illustrates and exemplifies this approach as it is serving 3.3 million people for improving their health and well being in partnership with business organization CMED and NGOs





Health and Well-being Policies and Community Engagement

Non-Smoking Campus

UIU strictly enforces a **no-smoking policy**, with immediate expulsion for students found in possession of any drugs.

Health and Wellness

The **UIU Medical Center** provides comprehensive **healthcare services**, including sexual, mental, and reproductive health services, along with education and information campaigns. **Regular awareness events** are organized for students.

Community Engagement

The UIU grounds are accessible for use by **local schools, colleges, universities, or the general public** with prior authorization from the university administration.



Local and Global Collaborations

UIU established successful collaborations with 50+ national and international health organizations.

Advanced Intelligent Multidisciplinary Systems Lab (AIMS Lab) of UIU is established to foster computer science research and development as well as to utilize the benefits of information technology for the society particularly in health.

The vision of its research is to investigate problems and develop innovative technological solutions that could potentially make an impact in the society, improve quality of life, and more importantly make a significant contribution in the scientific arena.

Furthermore, The Centre for Biomedical Science and Engineering (CBMSE), UIU is working in collaboration with different institutes to innovate and excel in education, training and research to translate knowledge and technologies that advance clinical medicine and promote medical physicists and biomedical engineering growth.

The vision of the Centre is to be an internationally recognized, research-oriented department and a top choice for undergraduate and graduate education.



Advanced Intelligent Multidisciplinary Systems Lab (AIMS Lab)

AIMS Lab of United International University (UIU) is a **R&D Lab** and the first of its kind in Bangladesh which has consistently maintained high standards of research and development.

The activities of AIMS Lab focuses on utilizing 4IR technologies and conducting research, innovation, incubation and commercialization culture.

The vision of AIMS Lab is to investigate problems and develop innovative technological solutions that can make a lasting **positive impact in the society, improve quality of life** and more importantly make a significant contribution in the scientific as well as economic arena.

In continuation of this, AIMS Lab is working on the projects which are very effective solutions for social & national problems.



**Market Brain: A Neuro_marketing System for
Advanced Marketing Research**



**AI Powered Career Pathway: Based on cognitive,
personality and psychometric assessments**



**Smart ENdo: An AI powered searching tool
for endometriosis risk assesment**



**AI Reception: Human-Robot interaction in bengali
language for better customer satisfaction**



**Market Brain: A Neuro_marketing System for
Advanced Marketing Research**





MarketBrain: A Neuromarketing System for Advanced Marketing Research

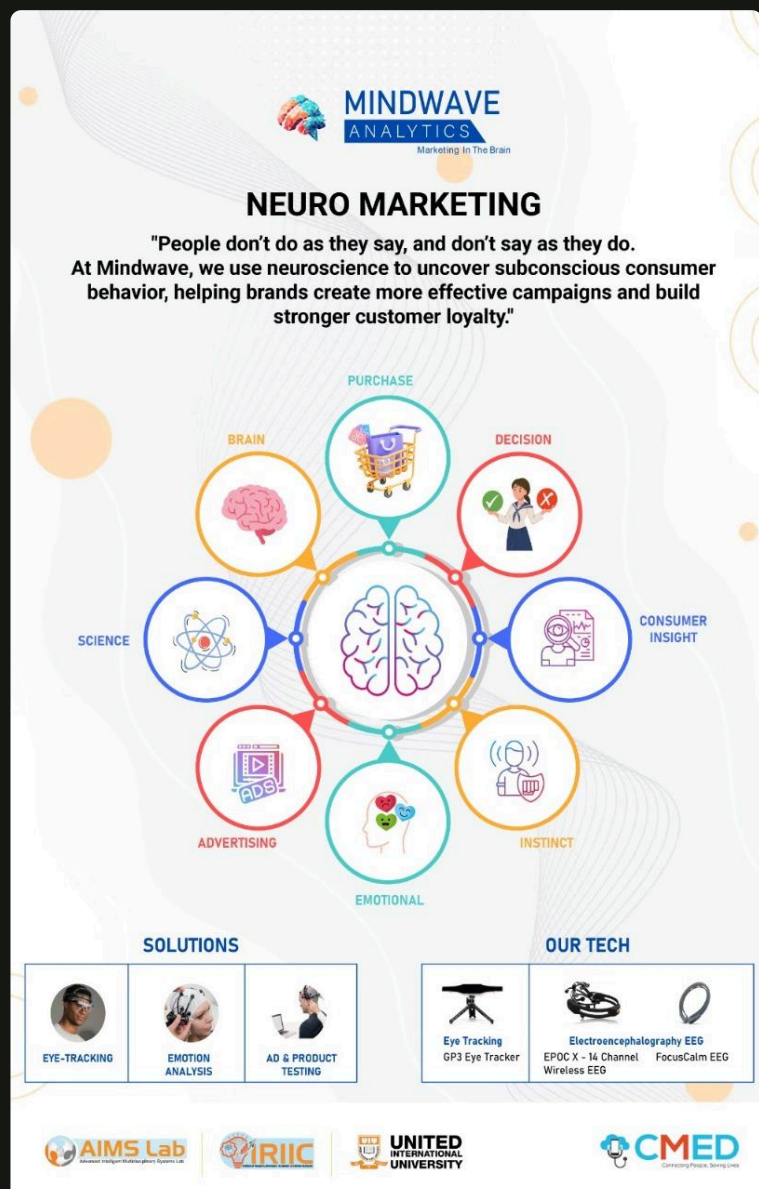
Neuromarketing, a Brain Computer Interface (BCI) based marketing research approach, uses brain signal recordings to analyze and predict consumer response to the marketing stimuli.

In developed countries, Neuromarketing is being vastly explored in academic research and it is successful running as industrial platforms as an alternative to traditional market evaluation techniques.

Traditional survey methods may provide unreliable consumer information due to indiscriminate self-reporting and time constraints. We are proposing to build the very first local Neuromarketing platform in Bangladesh by utilizing BCI and adapting industry 4.0 technologies.

Our intelligent system will identify consumer engagement with the advertisements based on consumers' cognitive and emotional responses measured from neural and physiological signal.

This platform will provide our local businesses cost efficient customized solution and will make our footprint in the world.





DEEP-DEPRESSION: Feasibility to Design and Development of Brain Computer Interface (BCI) Based System for Identifying Depression using Neural Connectivity Analysis of Human Brain

Deep-depression is Brain Computer Interface (BCI) based research approach that can help us to identify the biomarkers of healthy and depressed human brains.

Depression is a common and serious medical illness which affects negatively on our mood. According to global success academy, everyday almost 3000 suicide cases and about 60,000 cases have been found those may attempt to end their lives. It has been found that about 35.8% suicide is occurred due to depression.

According to global health estimation, 4.1% of the population in Bangladesh is suffering from depression. This ratio has been further increased due to COVID-19 and the main reasons behind this scenario are Stress from losing job, financial crisis, losing friends or family members.

Until now, for diagnostic purposes, psychiatrists chose different clinical questionnaire based assessments and observed the patient behavior to identify the presence of depression within the patients. However, this process is dependent mostly on the answers provided by the patients. On the other hand, the human brain cannot lie to us. So, along with the conventional techniques, BCI technology can be used to identify depression through analyzing brain signals.

According to the best of our knowledge, we are the first in Bangladesh going to develop this assistive technology. In the near future, this supervised model will help to quickly diagnose mental illness as well as become a helpful tool for the psychological farms which can create a foresight for the future generation in the field of psychology as well as neuroscience.





Bolte Chai

In order to ensure that everyone may express their preferences, the founder and Director of AIMS Lab, Prof. Khondaker Abdullah Al Mamun, PhD investigated and created a solution for people who are unable to speak.

He created a smartphone-based app in accordance with their needs. '**Bolte Chai**' is an Android mobile application developed for verbally challenged ASD children.

Considering the customization capability, the android application is divisible into two different modes. This Project is funded by the Information and Communication Technology Division (ICTD), in collaboration with AIMS Lab, UIU, Neuro-Developmental Disability Protection Trust (NDDP Trust), the Ministry of Social Welfare of the government of Bangladesh & Tauri Foundation (MoU).

The innovation Bolte Chai is an augmentative and alternative communication (AAC) tool incorporated in a mobile application, which is available in both android and iOS systems.

The application utilizes the picture exchange communication technique for speech-impaired people to communicate with others.

While pressing to a specific image, there generates sound which expresses the desires of the user. All the pictures and sounds can be personalized as per the need of the user.

A single tap SMS-based system is available in this application for assisting to seek help in case of any emergency situation for the users. All these features are already available in the current version of the app.

Boost your child's speech in a fun way

Your child is encouraged to speak by watching
mimicking peer modes

AIMS Lab





Virtual Eye Test

Bangladesh is one of the most densely populated countries in the world, where a significant number of populations are suffering eye health and visionary problems. Over the last decade, a rapid growth of ICT uses has shown in Bangladesh. Thus ICT based health services would be an effective solution for providing the better health services to the citizens of Bangladesh.

In this research work, an android based mobile application (Virtual Eye Doc) is developed in Bengali language to support the citizens of Bangladesh for their eye health monitoring and vision examination.

The paper highlights our experiences of designing and developing the Virtual Eye Doc application. This paper also presents a qualitative and quantitative exploration of the effectiveness and the perceived benefits of this app, and suggestions for improvement of this app.





Smart Autism Barta

If autism can be identified at an early stage, it can be said for sure that children with autism will not be a burden to the society; they can also play a vital role in various activities in the society.

'Smart Autism Barta' is a mobile-based, interactive, community-based screening tool used to diagnose and monitor autism.

Parents, physicians, trained health professionals can use this app and website to learn about autism screening and what to do next. By screening parents of autistic children in rural areas, this app can refer them to the closest hospital.

AIMS Lab, UIU, conducted a study and developed this screening questionnaire to identify autistic children in the early stage. Smart Autism barta is a a2i funded project. A MoU is signed between AIMS Lab, UIU and Neuro Developmental Disability Protection Trust (NDDP Trust) of The Ministry of Social Welfare of the government of Bangladesh.

The AIMS lab has signed MoU with Neuro Developmental Disability Protection Trust (NDDP Trust) and Tauri Foundation to work with the community in this regard. Also, several other innovations regarding tools for disease screening brain computer interaction for identifying depression and suicidal biomarkers using neural connectivity analysis of human brain has been developed. These along with the innovations from CMED health which is a startup supported by UIU works directly into the community for quality life and well-being.





Centre for Biomedical Science and Engineering (CBMSE)

The CBMSE and Alo Bhubon Trust (BT) jointly organize an accredited online e-learning program for developing cancer professionals for the updated technology (Therapy and diagnostic) used for cancer treatment.

In this way UIU and Alo BT are working for patient health benefits specially for cancer patients for South Asia including Bangladesh. These ELPs usually cover all the branches of Medical Physics aiming to improve the quality of cancer care and eliminate cancer in the South Asia region.

Most of these programs are attended by local and international participants (300+ participants from 22+ countries) and accredited by IOMP (International Organization for Medical Physics) and EBAMP (European Board for Accreditation for Medical Physics) respectively.



Shared Sports Facilities

UIU has a **large field** which accommodates two football playgrounds at the same time. We share our field with local schools, colleges and universities as well as the **local community** on a necessity basis.

Government and national level programs are also held at the large green field which accommodates the participants from all over the society with free access.

UIU has **gymnasium facilities** which are shared by students and employees.



Health Services

Sexual and Mental Health Services

The Directorate of Career Counseling & Student Affairs (DCCSA) and the UIU Medical Center collaborate to provide **mental and sexual health care** services to students.

Free Medical Services

The UIU Medical Center offers free **regular medical services** to students.

Awareness Programs

The DCCSA organizes occasional awareness programs to **support students' well-being**.

Non-Smoking Campus Policy

UIU is a strictly **non-smoking** campus.

Strict Anti-Drug Measures

Possession of drugs or any trace of drug use leads to **immediate expulsion**.

Proctorial Body Enforcement

A strong proctorial body is in place to help students **avoid engaging in harmful activities**.

UIU Social Services Club (UIUSSC), one of the leading clubs of **Directorate of Career Counseling and Student Affairs (DCCSA)** of United International University (UIU) organizes mental health related events regularly.

One such program was held in collaboration with **DocTime**. This program covered topics such as,

- Mental Health Awareness
- Diet & Nutrition

3 GOOD HEALTH AND WELL-BEING

