

Annual Report



'23

Department of Computer Science and Engineering

A Year of Resurgence

MESSAGE OF CHAIRPERSON



Welcome to the Department of Computer Science and Engineering (CSE) at Green University of Bangladesh (GUB). Since 2003, the CSE department has been dedicated to producing skilled graduates who meet the evolving needs of the IT industry. Our dynamic, career-focused curriculum is regularly updated to align with industry standards, ensuring students are ready for the digital world. Our distinguished faculty prioritizes both academic excellence and student development. Accredited by BAETE under IEB, our B.Sc. in CSE program adopted Outcome-Based Education in 2019, offering hands-on training, programming contests, and industrial attachments. We proudly support research through events like the International Conference on Sustainable Technologies for Industry 4.0 (STI) and provide nine modern labs for learning activities. Many of our alumni excel in top IT firms and prestigious global universities, with several receiving fully funded scholarships. Explore our department and join us on this journey of innovation and growth.

Sincerely, and with best wishes,

Dr. Muhammad Aminur Rahaman
Chairperson, Dept. of CSE
Green University Of Bangladesh





“CONFERENCES SEMINARS & WORKSHOPS”

CONTENTS

- Workshop on "Collaboration Opportunities at IIT, Patna & NLP Research Activities Intra University Programming Contest, 2023
- 6-Week Departmental Improvement Project
- The Workshop on Robot Controls: Beginner's Guide The First Meet Up of "GUCC Executive Committee 2023-24
- Opening Ceremony of 2022 ICPC Asia Dhaka Regional Contest
- 2022 ICPC Asia Dhaka Regional Contest
- International Conference on Sustainable Technologies for Industry 5.0 (STI 2023)

WORKSHOP ON "COLLABORATION OPPORTUNITIES AT IIT, PATNA & NLP RESEARCH ACTIVITIES"

The event was held on 20th February 2023. Honorable Prof. Dr. Md. Fayzur Rahman, Treasurer, GUB, glorified the workshop as Chief Guest. Distinguished speakers (Dr. Asif Ekbal, Associate Professor, Dept. of CSE, IIT, Patna) & (Dr. Sriparna Saha, Associate Professor, Dept. of CSE, IIT, Patna) shared their knowledge and expertise on the latest trends in NLP research.



6-WEEK DEPARTMENTAL IMPROVEMENT PROJECT

Commencement of the "6-Week Departmental Improvement Project" from the Dept. of CSE, GUB. It started with a blissful workshop of Week: 2, Day: 1, namely "Workshop On Lab Assessment Techniques And Lab Outline Construction", headed by Dr. Muhammad Aminur Rahaman, Honorable Chairperson, Dept. of CSE, GUB. In the 2nd day, The workshop was conducted smoothly by Honorable Syed Ahsanul Kabir, Associate Chairperson & Associate Professor, Dept. of CSE, GUB.

THE WORKSHOP ON ROBOT CONTROLS: BEGINNER'S GUIDE



A day-long workshop on "Robot Controls: The Beginner's Guide", organized by the Green Robotics Society (GRS) in association with the Department of EEE was successfully held on March 6, 2023. About 65 individual participants from EEE and CSE departments participated in this workshop. ASM Ahsanul Sarkar Akib, Cofounder & Technical Director of Japan Bangladesh Robotics and Advanced Technology Research Center, and CEO of Robo Tech Valley was present as our instructor of the workshop.

OPENING CEREMONY OF: ICPC ASIA DHAKA REGIONAL CONTEST 2023



The opening ceremony of the most prestigious international contest 2023 International Collegiate Programming Contest (ICPC) Asia Dhaka Regional Contest was held on 10 March 2023, Friday at the Permanent Campus of GUB. Prof. Dr. Muhammad Fayyaz Khan, Honorable Vice Chancellor of Bangladesh University Business and Technology graced the program as the Chief Guest where Prof. Dr. Md. Golam Samdani Fakir Fakir, Honorable Vice Chancellor of GUB was present as the Session Chair.





2023 ICPC ASIA DHAKA REGIONAL CONTEST



GUB organized the ICPC Asia Dhaka Regional Contest 2023 on March 11, 2023, at their permanent campus. Team DU Kronos representing Dhaka University was declared the champion of the competition while team DU Not Ready also representing Dhaka University was announced as the first runner-up. From BUET, team BUET Sommohito secured the second runner-up position. Mr. Samsul Arefin, the Secretary of the Information and Communication Technology Department, handed the prizes to the winning teams. The first three teams in the competition were also given flight tickets courtesy of US-Bangla on Dhaka-Dubai-Dhaka, Dhaka-Singapore-Dhaka, and Dhaka-Bangkok-Dhaka routes.

INTERNATIONAL CONFERENCE ON SUSTAINABLE TECHNOLOGIES FOR INDUSTRY 5.0 (STI 2023)



The 2023 5th International Conference on Sustainable Technologies for Industry 5.0 was held at the Green University of Bangladesh, from December 09-10, 2023. This conference is proudly organized by the FSE at the GUB, with financial co-sponsorships from the parent organization, i.e., GUB and US-Bangla Airlines. This is the first conference in Bangladesh with technical co-sponsorship from the IEEE Computer Society, Washington, DC, USA. Among 300 papers from over 39 countries, 119 have been accepted for presentation and publication in the IEEE Digital Library.





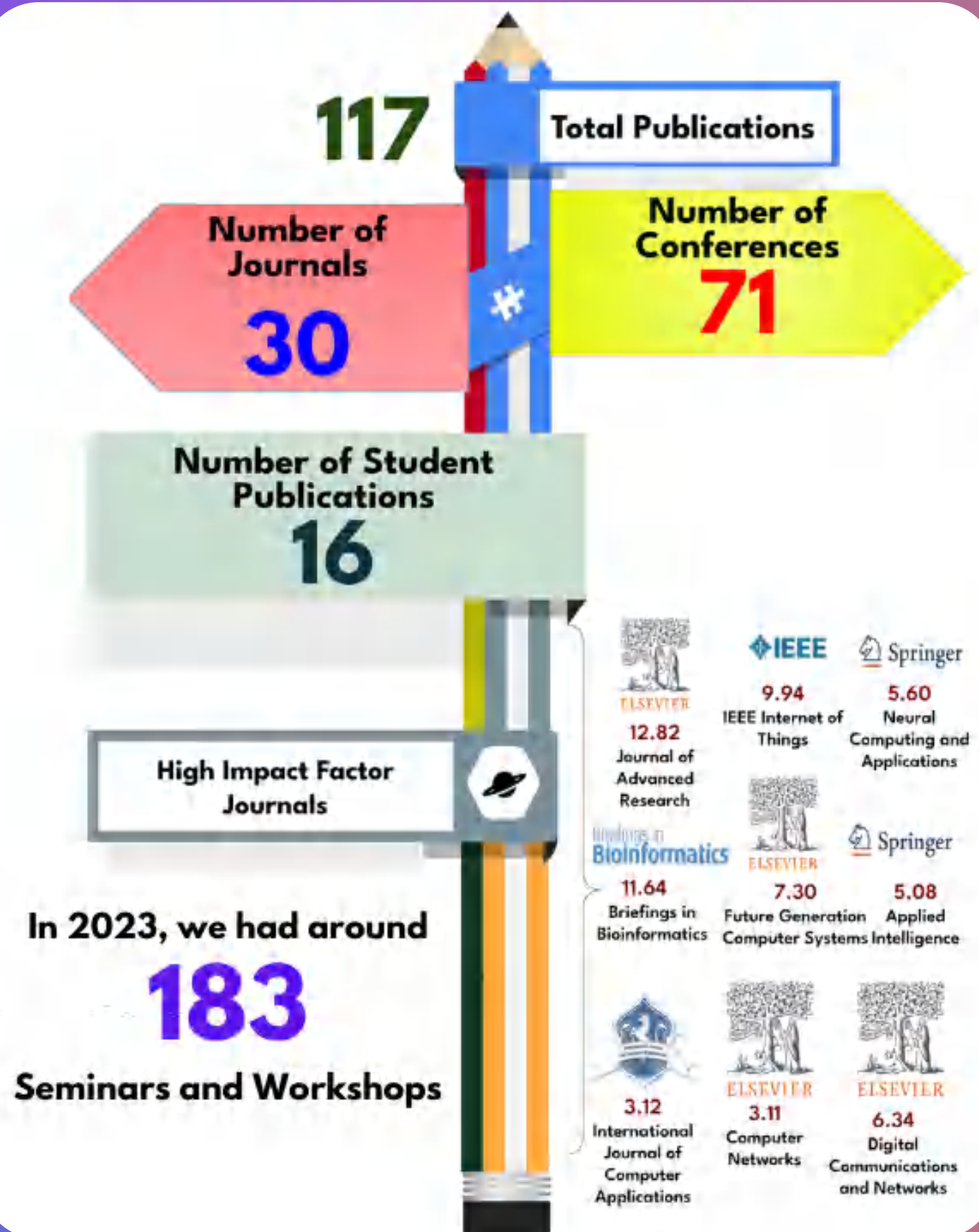
“AWARDS AND ACHIEVEMENTS”

CONTENTS

- Team "Dynami Fantasias" on becoming a semifinalist in the Hult Prize Mumbai 2023 Summit!
- GUB Annual Research Publication and Grants Award Ceremony 2023
- Best student paper award 2022 ICPC Asia Dhaka Regional Contest
- NASA Space Apps Challenge
- Front-End Coding Contest

Research Activities (2023):

**Research
Grants &
Fellowship
Amount Over
the Years
2021-2023:
0.92
Million BDT**



TEAM "DYNAMI FANTASIAS" ON BECOMING A SEMIFINALIST IN THE HULT PRIZE MUMBAI 2023 SUMMIT!

This is an incredible achievement and they are highly appreciated for their hard work and dedication. We know that they have all put a lot of time and effort into their project, and it is clear that they are passionate about making a difference in the world. Their solution will make a real impact on the lives of millions of people.



GUB ANNUAL RESEARCH PUBLICATION AND GRANTS AWARD CEREMONY 2023



The Center for Research Innovation and Transformation (CRIT) of Green University of Bangladesh organized the GUB Annual Research Publication and Grants Award Ceremony 2023 on 29 December 2023. Green University of Bangladesh recognized and rewarded high-quality research publications produced by eligible researchers of the GUB to encourage them to conduct more quality research work.

FRONT-END CODING CONTEST

Sikder Md. Shariful Islam, brilliant Information Secretary of the Green University Computer Club (GUCC), secured the 1st Position in the "Front-End Coding Contest" hosted by Non-Academy! His remarkable achievement outshines the 250+ participants from universities across Bangladesh.. Students of some universities like KUET, JUST, etc take place in the top 10. His dedication and skill in front-end coding have truly shone through.



NASA SPACE APPS CHALLENGE 2023

Jakir Hossain Munir and his "Team Eclipsia" became the National Champions from the Sylhet Division in the "NASA Space Apps Challenge-Bangladesh 2023". This Hackathon starts on October 6, 2023, and runs for 36 hours continuously. In Dhaka, on October 7, 2023 the award distribution of NASA Space Apps Challenge 2023 was held. Minister of Education was present as the Chief Guest Dr. Dipu Moni, IUB Vice-Chancellor Prof.

Congratulations!

for achieving the outstanding achievement of Joy Munshi, Sumaya Sultana & Md. Jahid Hassan of CSE, GUB at the 10th International Conference on NSysS 2023 organized by the Dept. of CSE, BUET

Best Student Paper Award



Paper Title

Delay and Cost Aware Adaptive Deployment and Migration of Service Function Chains in 5G

Author

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BEST STUDENT PAPER AWARD

Joy Munshi, Sumaya Sultana & Md. Jahid Hassan of CSE, GUB achieved the outstanding achievement of the 'Best Student Paper Award (\$200)' at the esteemed 10th International Conference on Networking, Systems, and Security (NSysS '23) organized by BUET. Under the guidance of the esteemed Supervisor, Dr. Md. Abdur Razzaque, Professor, Department of CSE, DU, and the Co-supervisor, Palash Roy, Lecturer, Department of CSE, GUB, the research project titled "Delay and Cost Aware Adaptive Deployment and Migration of Service Function Chains in 5G" has truly shone as a beacon of excellence.

“STUDENT CLUB ACTIVITIES”

CONTENTS

- Freshers Orientation Program- Spring 2023
- Intra University Programming Contest, 2023
- Intra Department Programming Contest, Spring 2023 hosted by the Department of CSE (PC), GUB
- The First Meet Up of "GUCC Executive Committee 2023-24"
- The Freshers' Orientation Program, Fall 2023, CSE
- Celebration of 10 Years of Dedication and Achievement of GUCC at "GUCC Day 2023"

FRESHERS ORIENTATION PROGRAM-SPRING 2023

Department of Computer Science and Engineering warmly welcomed its newly enrolled undergraduate students for the Spring 2023 Semester for both City and Permanent Campus through an orientation ceremony on Wednesday, 08 February 2023 at Level-1 (Ground Floor) in our Permanent Campus.



INTRA UNIVERSITY PROGRAMMING CONTEST, 2023

Intra University Programming Contest (IUPC), organized by Green University Computer Club (GUCC) was successfully held on February 28, 2023. The event was arranged under the banner of Green University Computer Club (GUCC) for Primary Level Contestants. About 100 individual contestants from 1st year and 2nd year students participated in this contest.

INTRA DEPARTMENT PROGRAMMING CONTEST, SPRING 2023 HOSTED BY THE DEPARTMENT OF CSE (PC), GUB

An event titled "Intra Department Programming Contest, Spring 2023" was successfully completed on 9th of June 2023, hosted by the Department of Computer Science and Engineering (Permanent Campus), Green University of Bangladesh (GUB).



THE FIRST MEET UP OF "GUCC EXECUTIVE COMMITTEE 2023-24"

First Meet Up of "GUCC Executive Committee 2023-24" was scheduled on 4th August 2023. This was met with enthusiastic nods and an eagerness to absorb as much knowledge as possible. The agenda for the meeting encompassed a range of topics, including introducing the club's objectives, maintaining discipline and professionalism, outlining its planned activities for the upcoming semester, and discussing potential workshops, seminars, and programming competitions.

THE FRESHERS' ORIENTATION PROGRAM, FALL 2023, CSE

On September 17, 2023, the Dept. of CSE, Green University of Bangladesh, along with the Green University Computer Club: GUCC organized an Orientation program entitled "Freshers' Orientation Program, Fall 2023 " to welcome its newly enrolled undergraduate students at the Green Cafe of the campus.

CELEBRATION OF 10 YEARS OF DEDICATION AND ACHIEVEMENT OF GUCC AT "GUCC DAY 2023"

The Green University Computer Club (GUCC) marked a momentous milestone on December 22nd, 2023, with their 10th Anniversary celebration: "GUCC Day 2023". As the vibrant departmental club of the Dept. of CSE- Green University of Bangladesh, GUCC has consistently contributed with unwavering dedication and passion throughout its remarkable journey. The Dept. of CSE, GUB extend their warmest congratulations to GUCC on this special achievement and express their deep gratitude for their invaluable contributions.



“OTHER ORGANIZED EVENTS”

CONTENTS

- Get Together of CSE Department, GUB
- Press Conference on 2022 ICPC & Media Coverage-
- CSE Faculty Day Tour Spring 2023
- Successful Completion of the "Pithali Vhoj"
- IEEE Retention Day 2023 for IEEE GUB Student Branch
- Inaugural Ceremony 2023 of the IEEE Student Branch, IEEE PES, and IEEE CS Student Branch Chapter of the Green University of Bangladesh
- MoU Signing Between Dept. of CSE, GUB & Battery Low Interactive Ltd.
- MoU Signing Between Dept. of CSE, Green University of Bangladesh & Object Canvas Technology
- Honoring our New Dean of FSE, Director of IQAC, and Chairperson of CSE at GUB

GET TOGETHER OF CSE DEPARTMENT, GUB

The Department of Computer Science and Engineering (CSE) hosted a get-together on January 11, 2023, at The Aristocrat Lounge to strengthen bonds among faculty and staff. The event fostered camaraderie and a supportive community within the department.



PRESS CONFERENCE ON 2022 ICPC & MEDIA COVERAGE

A press meet for the 2022 ICPC Asia Dhaka Regional was held on January 9, 2023, at Green University, led by Vice-Chancellor Prof. Dr. Md. Golam Samdani Fakir and other key faculty members. The event covered registration details and schedules, with the preliminary round on February 11, 2023, and the final on March 11, 2023.



CSE FACULTY DAY TOUR SPRING 2023

The Department of CSE at Green University completed the "CSE Faculty Day Tour 2023" at Sea Shell Park & Resort, featuring refreshments, sports, a cultural program, and a raffle draw. Honorable Treasurer Professor Dr. Md. Fayzur Rahman and Dean Prof. Dr. Md. Saiful Azad awarded prizes to winners and thanked the organizing committee for the successful event.



SUCCESSFUL COMPLETION OF THE "PITHALI VHOJ"

The Pitha Uthsob "Pithali Vhoj," organized by the Green University Computer Club, was held on February 14, 2023, at the Green Garden rooftop. The event featured speeches, cultural programs, and 24 types of pithas, providing a platform for students to interact and experience Bengali culture.

IEEE RETENTION DAY 2023 FOR IEEE GUB STUDENT BRANCH

The IEEE GUB Student Branch hosted "Retention Day 2023" on February 25, 2023, at Green University's Permanent Campus. Keynote Speaker Prof. Dr. MD Ahasan Habib and other notable faculty participated, with 85 attendees and 48 new IEEE members. The event included speeches, an idea gaming contest, and a cultural program, ending with a concluding speech by Dr. Muhammad Aminur Rahaman.



INAUGURAL CEREMONY 2023 OF THE IEEE STUDENT BRANCH, IEEE PES, AND IEEE CS STUDENT BRANCH CHAPTER OF THE GREEN UNIVERSITY OF BANGLADESH

The IEEE Student Branch, IEEE PES, and IEEE CS Student Branch Chapter at Green University of Bangladesh held their inaugural ceremony on May 5, 2023. Keynote speakers included Prof. Dr. Md. Abdur Razzaque, who discussed Industry 5.0, and Prof. Dr. Mohammad Shamsul Arefin, who spoke on recommendation systems. Special guests and session chairs highlighted the significance of human-machine collaboration and data collection for machine learning.



MOU SIGNING BETWEEN DEPT. OF CSE, GUB & BATTERY LOW INTERACTIVE LTD.

On May 15, 2023, the Department of Computer Science and Engineering at Green University of Bangladesh signed an MoU with Battery Low Interactive Ltd to enhance academic-industry collaboration.

The ceremony, led by Vice-Chancellor Prof. Dr. Md. Golam Samdani Fakir, saw Prof. Dr. Md. Saiful Azad and Istiaque Ahmed signing the agreement, which will facilitate joint projects, internships, and knowledge sharing.



MOU SIGNING BETWEEN DEPT. OF CSE, GREEN UNIVERSITY OF BANGLADESH & OBJECT CANVAS TECHNOLOGY

On July 14, 2023, the Department of CSE at Green University of Bangladesh signed an MoU with Object Canvas Technology to enhance academic-industry collaboration. The event, presided over by Vice-Chancellor Prof. Dr. Md. Golam Samdani Fakir, saw Prof. Dr. Md. Saiful Azad and Md. Motiur Rahman of Object Canvas Technology formalizes the agreement.

HONORING OUR NEW DEAN OF FSE, DIRECTOR OF IQAC, AND CHAIRPERSON OF CSE AT GUB

Prof. Dr. Md. Saiful Azad was honored as the new Dean of FSE and Director of IQAC, while Dr. Muhammad Aminur Rahaman was recognized as the new Chairperson of the CSE Department at GUB. Faculty members and distinguished guests celebrated their appointments, confident in their leadership's potential to elevate academic excellence.

