

SEPS newsletter

School of Engineering and Physical Sciences

Editorial



It gives us immense pleasure and honor to bring to you the new and improved SEPS Newsletter, your source for every achievements and events going on in the School of Engineering and Physical Sciences at North South University.

I personally call this publication 'The Phoenix.' In Greek mythology, a phoenix is a long-lived bird that cyclically regenerates or is otherwise born again. Associated with the Sun, a phoenix obtains new life by arising from the ashes of its predecessor.

Just like the phoenix, SEPS Newsletter is coming to you after several years with newer content, arrangement, and sections.

We have done our level best to cover all the four departments i.e. Department of Electrical and Computer Science, Department of Mathematics and Physics, Department of Civil Engineering and Department of Architecture, that are all under the umbrella of SEPS.

It is reality, in some semester, some departments arrange a lot of events and newsworthy acts, whereas some stay dormant. Eventually in another semester, the previously dormant departments rise to achieve even greater newsworthy moments. As this is the Spring 2018 of SEPS newsletter, such may reflect as well. Gradually in the upcoming semesters, we hope to have a more uniform distribution.

It has been a group effort from a very active board of faculty members and students. I congratulate and offer my gratitude to all individual connected with the endeavor.

Having said this SEPS is the fastest school in NSU and we have a lot to say. Therefore, we plan to publish this newsletter every upcoming semester.

For everything good we could deliver, it is your achievement and as for every mistake or limitation, we accept your constructive criticism.

With another call to arms to all departments, I am signing off by presenting you with the Spring 2018 issue of SEPS Newsletter.

Your contributions are cordially welcome in the upcoming issues.

Adnan Firoze

Core Faculty Member, ECE
Teaching Fellow, Columbia University, New York, USA
adnan.firoze@northsouth.edu



NSU students won 2nd Women's Mathematics Olympiad 2018

The competition was designed to test students' mathematical creativity and their ability to formulate and defend their conclusions.



Tasmia Rahman Shahidi, from the department of ECE and Tasfea from Civil and Environmental Engineering, respectively won the 4th and 7th position in the 2nd Women's Mathematics Olympiad 2018. The competition was organised in cooperation with Department of Mathematics, the University of Dhaka and Women's Mathematics Olympiad Committee and A. F. Mujibur Rahman Foundation. 180 students from 20 different universities from all over the country participated. Honourable faculty members from the Department of Mathematics, University of Dhaka judged the event. The winner from NSU has praised their faculties for being supportive and to encourage them to participate in such activities. Ms Tasmia said 'Mathematics is one of her favourite subjects and Dr. Hasina Akhter, faculty of Mathematics department at NSU specially guided her for the event.

Rather than testing students' ability to recall facts, the competition was designed to test students' mathematical creativity and their ability to formulate and defend their conclusions. Every student has some potential abilities and skills, participating in different competitions is one of the ways to hone the skills and take one to the next level.

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	Associate Editor	Md. Zahangir Hossain <i>Senior Lecturer, DMP</i>	Aziz Arman	Published by
	Shariar Iqbal Raj <i>Assistant Professor, ARCH</i>	Ashfia Binte Habib <i>Lecturer, ECE</i>	Ahmed Uz Zaman Mahbuba Tasnim Kazi Ayesha Rahman Tanvir Islam Sunny Sabrina Samreen	School of Engineering and Physical Sciences, SEPS South Academic Building, SAC 617 Phone: +88 02 55668200 Ext: 1536 email: news.seps@northsouth.edu



Meet Women Engineers

it is not okay to take
"NO" as an answer

-Sharmina Zaman



Dr. Shohana Deeba



Dr. Nova Ahmed



Ms. Tamanna Motahar



Ms. Sharmina Zaman

To celebrate the four decades of female involvement of women on International Women's Day, IEEE NSU Student Branch, Women In Engineering Affinity Group (INSB WIE AG) organised an event named "Meet Women Engineers" on March 8, 2018, at AUDI 801, North South University. The event was aimed to salute women in every field especially those in engineering fields and to encourage women to come forward in the society and follow their dreams and greet themselves for their contribution as a woman in the society, being a mother, a daughter, a mentor, in one word an all-rounder.

The event was initiated through a welcoming and inspiring speech by Dr Shohana Deeba, Advisor, INSB WIE AG. Dr Nova Ahmed, Associate Professor, North South University talked about how to survive in North South University and the fact that it may seem hard but not impossible to have fun in here. Ms Tamanna Motahar, Lecturer, North South University and she pointed out how difficult the path is for a woman in becoming an engineer and then again struggling to continue her journey as an engineer after completing her studies. Following this, Sayma Shammi, an alumna of ECE Department, NSU and Vice-

Chancellor Award holder, shared her untold reminiscence and struggle of being an engineer and continuing her studies, combatting the difficulties throughout her pregnancy and overcoming all the societal hindrances. Then the stage was Khalida Sultana Shuravi's who is an alumna of North South University, ECE department and also Vocal and Keyboardist at Candle Carmine. She walked everyone through her life by sharing how to get the best of both worlds. She was always an active musician and was able to publish a paper, "A Low-Cost Wireless Braille System Hand Glove for Real-Time Communication" in an IEEE sponsored conference based on her work in the Senior Design Project. And the last speaker was Ms Sharmina Zaman, Senior Lecturer, North South University and she taught everyone that it is not okay to take "NO" as an answer.

To wind up the event, Dr Shohana Deeba, concluded the session with a closing speech and with the presence of all the speakers, all female ECE faculties including Tanjila Farah, Branch Counselor, IEEE NSU SB, WIE Executive Bodies and participants commemorated International Women's Day by cutting a cake. Parisa Shakur- Director-Student Affairs, NSU was also present in the event.

Training Program on Rainwater Harvesting

The Workshop focused on different issues and opportunities in rainwater harvesting

Department of Civil & Environmental Engineering (DCEE), in collaboration with WaterAid & RAIN Forum, hosted a day-long workshop on Rainwater Harvesting on March 6th, 2018. Students from the Dept. of Civil & Environmental Engineering and the Dept. of Architecture were the participants.

Dr Anwar Zahid, director of Groundwater Hydrology of Water Development Board, conducted a session on the groundwater level and the current groundwater conditions of all the major cities. The Secretary of RAIN Forum, Architect Md Ashrafal Alam Ratan gave a presentation global perspective and policies regarding RWH in Bangladesh. A session on the basic concept and basic design were conducted by Syed Azizul Haq, the president of RAIN Forum.

Jubaida Gulshan Ara, from Southeast University, shared a



few case studies of successful RWH projects and discussed BUET, VERC, IUB's rainwater harvesting projects. The interactive workshop led by group exercises and 60 participants were divided into five groups and given a residential plan to design an RHW and presented among others.

Certificates of training were given to all the participants along with the book "Prospectus, Principles and Practice of Urban Rainwater Harvesting in Bangladesh". The Dean of SEPS Dr Arshad handed tokens of appreciation to all personnel from WaterAid & RAIN Forum. Dr Nazmun Nahar, Professor of DCEE and the Director of IQAC, was the instrumentalist of the whole program.



First Step

Towards Architecture

an studio project exhibition the Department of Architecture, NSU

An exhibition named “First Step Towards Architecture” was organized by the students of Batch 173 of the Department of Architecture at North South University. They showcased the projects of Design Studio One at the NSU Exhibition center from 24th to 26th December of the year 2017. The studio instructors were Tarek Haider and Alia Shahed. The exhibition displayed eight projects, explaining their building process and their details. It also included watercolor paintings, sketches and other works of design. The entire exhibition was planned and executed by the students with the help of the studio instructors. It showcased the learning process of an architecture student and provided an interesting perspective on the way they see, visualize and execute.



International Conference on Heritage Management Education and Practice: Exploring Connections across Disciplines and Stakeholders

Ahmedabad University-2017

Mujtaba Ahsan and Shahriar Iqbal Raj presented a paper at the conference titled, *Heritage Conservation Education: A Case for Introduction in the Undergraduate Architecture Curriculum*

Three faculty members from the Department of Architecture, Mujtaba Ahsan, Shahriar Iqbal Raj and Maruf Hossain participated in the International Conference on Heritage Management Education and Practice that took place in July 2017 at the University of Ahmedabad, India, with the key theme of ‘Exploring Connections across Disciplines and Stakeholders.’ About 60 presentations featured in the conference, as well as the plenary sessions, explored the possibilities of connections across disciplines and stakeholders. The conference delegates were representing 12 countries and diverse disciplines including architecture, conservation, history, cultural studies, museums, crafts, disaster risk management, and so on. Mujtaba Ahsan and Shahriar Iqbal Raj presented a paper at the Conference titled, *Heritage Conservation Education: A Case for Introduction in the Undergraduate Architecture Curriculum*.

The event was followed up by an Undergraduate Students Symposium and Workshop on Heritage Studies in November 2017 where seventeen students from the Department of Architecture, North South University



participated with a full free scholarship to the event. The students were given very warm hospitality and wide exposure as the single largest delegate from a foreign country to a variety of important issues on heritage conservation. A city tour to Ahmedabad’s renowned heritage district was arranged for the students with well-known Indian conservation activist Mr Debashish Nayak.

Dr. Nabil Shovon Ashraf Awarded Albert Nelson Marquis Lifetime Achievement Award, USA



Dr. Nabil Shovon Ashraf has achieved unprecedented achievement in research – as the first academic in Bangladesh

In 2017, Dr. Nabil Shovon Ashraf, Associate Professor, Department of ECE of North South University has been awarded Albert Nelson Marquis Lifetime Achievement Award, the most prestigious award from Marquis Who's Who LLC, USA. He is the first Bangladeshi academician to receive such "prestigious award. The award distinguishes the recipient as demonstrating the highest level of dedication and integrity in a teaching and research field with significant and noteworthy contributions.

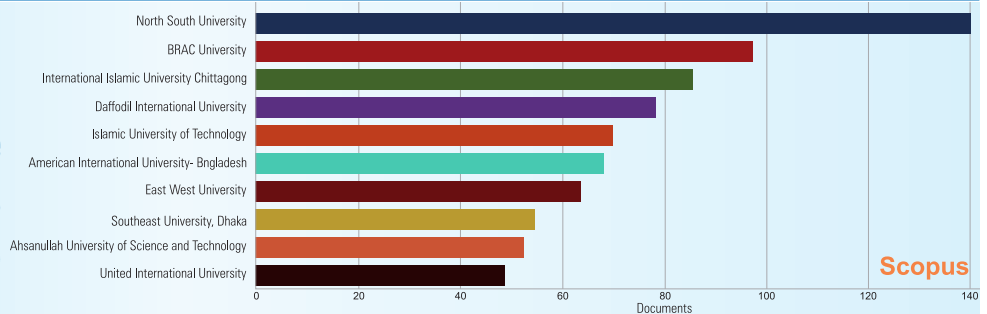
Publication: In 2016, Dr. Nabil Shovon Ashraf, Assistant Professor, Department of ECE of North South University co-authored an ebook "New Prospects of Integrating Low Substrate Temperatures with Scaling Sustained Device Architectural Innovation" published by Morgan & Claypool Inc., USA. The book has been collected by the libraries of top US Institutions like MIT, UC Berkeley, Stanford, UIUC, Caltech, Harvard, Cornell, Georgia Tech and other top universities in Canada, Europe, Australia and New Zealand. More info: www.morganclaypool.com/doi/abs/10.2200/S00696ED1V01Y201601EET004

Success in Research: Dept. of ECE, NSU has Published research papers in High Impact Factor International Journals



In this year, Dr. Mahdy Rahman Chowdhury, an Assistant Professor in the Dept. of Electrical and Computer Engineering (ECE) at North South University, has published a peer reviewed international journal with one of his BSc students Hamim Mahmud Rivy in Scientific Reports, **Nature Publishing Group**. The research article theoretically predicts the possible control of the reversal of near field optical binding force (attractive to repulsive force and vice versa) for plasmonic heterodimer nanoparticles. They have shown the controlling mechanism for the reversal of longitudinal binding force just by changing the direction of light or just by changing the relative orientation of the dimers. This observation along with the proposed simple techniques in the article can be very useful for improved sensors, all-optical particle clustering, aggregation and biomedical applications. Just before the publication of this article, Dr. Mahdy et al. have shown in another article (published in same journal in 2017): such controllable attractive and repulsive forces are also possible for plasmonic homodimer nanoparticles.

Scopus graced NSU as the first position in the private university rankings for the year 2017-18



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NSU retains its first position in the private university rankings for the year 2017-18 in Scopus. Scopus is the most legitimate indexing academic indexing platform internationally. This is a massive feat for both the Department of ECE and Dr. Mohammad Rashedur Rahmen.

Dr. Rashedur M Rahman,
Professor, Department of
ECE leads in terms of
publication among all
from NSU

First Batch of CEE Students graduate at the NSU 21st Convocation



Md. Tauhidul Islam terms his experience at NSU unforgettable and calls it a bag full of mixed emotions and as he graduates

The very first batch of the Department of Civil and Environmental Engineering graduated in the North South University 21st Convocation held on 17th February 2018 in the North South University premises. The idea to launch the Department of Civil and Environmental Engineering came up in 2003, proposed by BoT member Benajir Ahmed. However, the department officially started its journey in Summer 2013 as a full fledged program. There are currently 8 fully functioning, state of the art laboratories of the department. The Department of Civil and Environmental Engineering (DCEE) aspires to be a leader in providing engineering solution to sustainable infra structure and environment.

A total of 23 students graduated in the 21st Convocation. Md. Nazmul Islam, Chair, CEED, says that he is overjoyed at

being a witness to the convocation of our very first batch. He congratulates the graduating students, and urges them to continue to strive towards excellence as an engineer and contribute towards the welfare of the society. As the first batch, they must shoulder the responsibility of paving the way towards learning and achievement. Md. Tauhidul Islam (ID: 1320572025) terms his experience at NSU unforgettable and calls it a bag full of mixed emotions and as he graduates, he thanks NSU for teaching him to believe in himself and reinforcing that he can do anything he wishes. Shafkat Sharif, another graduating student, said unparallel inspiration and lifelong lessons imparted in 4 years has challenged him to think differently, be a responsible engineer, environmentalist and an innovator. He heartily thanks his amazing mentors and classmates.



Three of NSU's ECE undergraduate programs are now officially accredited by Board of Accreditation for Engineering and Technical Education (BAETE)

The Department of Electrical and Computer Engineering (ECE) at NSU received accreditation from Board of Accreditation for Engineering and Technical Education (BAETE) for three of their major programs. The degrees that achieved this momentous milestone are B.S. in Computer Science and Engineering, B.S. in Electrical and Electronics Engineering, and B.S. in Electronics and Telecommunication Engineering. This achievement will enhance the employability and prestige of the engineering program of the department. The whole faculty body and staff significantly contributed in this accomplishment.



Big data seminar held with industry experts at NSU ECE

NSU promises to provide all types of required training to its students to let them fit in the appropriate job market.- Dr. G U Ahsan

To bring an insight to big data and tools to handle it, NSU arranged a seminar on Big Data from the ECE department, supported by NSU ACM Student Chapter. Prominent personnel of tech industry of Bangladesh was invited to share their views on how students should be trained on big data field to help them adjust to the industry.

Dr. Rezaul Bari, former chairman, ECE department, gave the welcome speech. Chair of ECE, Dr. Shazzad Hossain gave a short introduction on the objective of the session. The session chair was adorned by Dr. G U Ahsan, Pro Vice-Chancellor Designate, NSU. Also, Dr. Sirajul Islam, Former Dean of SEPS (School of Engineering and Physical Sciences) was present there.



Representative from Grameenphone, REVE System, Leads Corporation, Business Accelerate BD Ltd and CramStack and faculties from NSU were present as active speakers of the seminar. They talked and shared opinions about nature of data, storage mechanism, works on companies on this field, tools used to deal with it and how university-industry can collaborate to move towards the greater goal for all.

Dr. G U Ahsan, in the concluding speech said that NSU has the sole aim to create world-class competent graduates and this seminar was just a step ahead of that ongoing effort. As a leading private university, NSU promises to provide all types of required training to its students to let them fit in the appropriate job market.

Seminar on Cyber-security at North South University

Dr. Sadia Afroz
talked about the
discrimination of
anonymous internet
users

A Seminar on Internet security was organized by North South University ACM Student chapter on 14th December 2017. The chief guest of the seminar was Dr. Sadia Afroz, a research scientist of International Computer Science Institute (ICSI).

Her work focuses on anti-censorship, anonymity and adversarial learning. Her work on adversarial authorship attribution received the 2013 Privacy Enhancing Technology (PET) award and the 2014 ACM SIGSAC dissertation award.

Dr. Sazzad Hossain, former faculty sponsor of NSU ACM



Student chapter and other teachers of the ECE were also present in the seminar. While discussing about the security aspects of Internet users, Dr. Sadia Afroz compared the Internet users of Bangladesh with the Internet users of different countries from all over the world. She gave a clear idea about various types of internet security layers in the seminar and talked about the discrimination of anonymous users. Students of North South University, BUET, IUT, IUB and MIST were also present.

Bi-Weekly Colloquium by Department of Mathematics and Physics

This event aims to inspire students and faculties to engage in research in the field of mathematics and physics.



Department of Mathematics and Physics (DMP) organizes a bi-weekly colloquium on the Application of Mathematics and Physics in Real life in a regular manner. This event aims to inspire students and faculties to engage in research in the field of mathematics and physics. The recent colloquium took place on 22 March 2018 at SAC 1041, the conference room of DMP. Students from different engineering disciplines and the faculty members of DMP were present at the colloquium.

Dr. Md. Hamidul Islam, Assistant Professor, DMP was the speaker at this colloquium. The title of his talk was

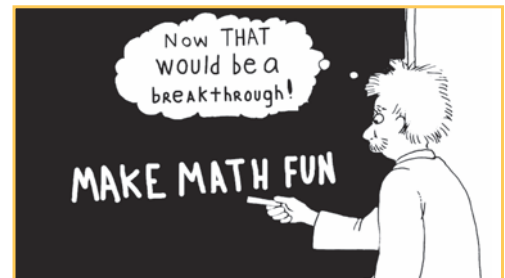
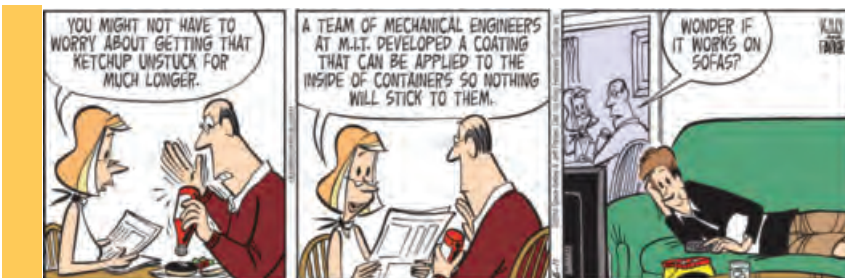
“Modelling Atherosclerosis as an Inflammatory Disease”. Dr. Islam spoke about the benefits and challenges of the modelling the immunological events of atherosclerosis that take place at the very early stages of this disease. He discussed how the differential equation model comprising equations for the species that are believed to play a key role in the early stages of atherosclerosis can be used to provide an integrated description of the mechanisms of the formation of an early atherosclerotic lesion. Dr. Islam also pointed out how different levels of cholesterol can affect the cell dynamics leading to different outcomes of the inflammatory response.

International Pi Day Celebration at NSU Campus by Department of Mathematics and Physics

The Department of Mathematics and Physics celebrated the International Pi (π) day at NSU campus in 2018. Honorable Vice-Chancellor Professor Atiquil Islam, Pro-Vice Chancellor Professor Gias Uddin Ahsan, Dean Professor Arshad M Chowdhury, SEPS, DMP Chairman Professor Partha Pratim Dey were present in this program and delivered their speeches. Their speeches were followed by a small lecture session on π , Euler’s number e and the golden ratio ϕ by Dr. Hasina Akter, Ms. Sharmin Sultana and Dr. Preetom Nag respectively. After the lecture session, a cake bearing the symbol of Pi on top was cut by the Vice-Chancellor and Pro-Vice Chancellor, and distributed among the audience. Then two contests, led by Dr. Muhammad Asad Uz Zaman, were held. The first contest

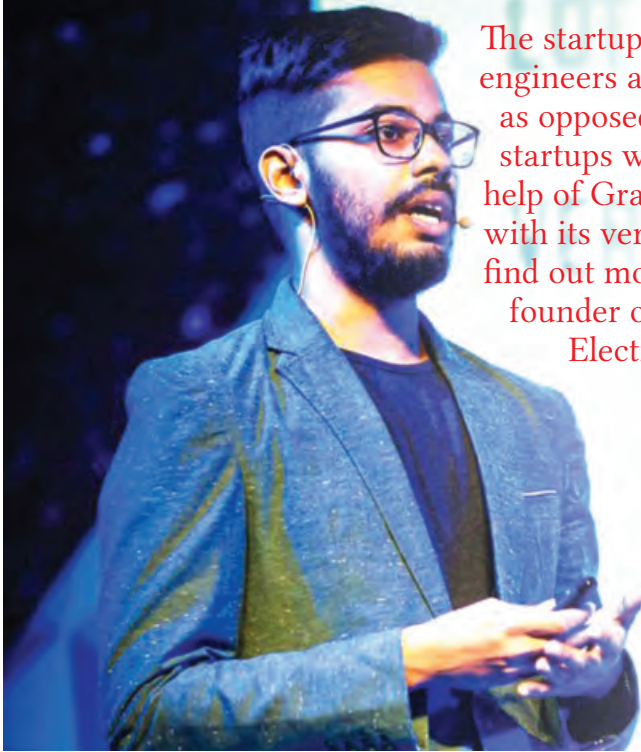


was the challenge to memorize the digits of Pi, while the second contest was to find the area of a circular plate using ruler, string, and Pi. Finally, the program ended with a vote of thanks by Dr. Hamidul Islam.



Interview

NSU ECE to Google: The Story of Mir Sakib and Cramstack



The startup revolution is in full swing in Bangladesh. The tech savvy engineers are rooting for creating their own tech startup businesses as opposed to adopting traditional jobs. One of the promising startups we have seen come out of North South University, by the help of Grameenphone Accelerator's is Cramstack, a data company with its very own business intelligence and analytics platform. To find out more about their journey, we spoke to the CEO and co-founder of Cramstack, Mir Sakib – alumnus of the Department of Electrical and Computer Science at NSU.

Hi Sakib! Firstly, tell us the story of you in NSU and transitioning to the startup giant's co-founder.

Hello. Actually there is a funny story here. I graduated from NSU in BS in Computer Science in December 2011. Upon graduation, my beloved yet traditional family wanted me to take a job. And so did I. I worked for Incepta Corporation for a few months before realizing that I want to make something of my own. And wallah! Cramstack was born.

When I was working in my previous company, I noticed maintenance of data in this country is questionable. People either work with excel or manually input the data. Many companies store their massive chain of data on paper. When executives take any business decisions, they put heaps of files in the table. This did not seem very efficient or really data-driven so I wanted to make a platform that helps making quicker and more effective data-driven decisions. I left my job and started working with two of my friends to create a Business Intelligence (BI) tool, and that's how Cramstack began!

I quit Incepta in November 2015 (without my family's knowledge). Then in March 2016 we as a team won a Hackathon in May 2016 and there we were put in touch in people like angel investors who liked our idea or pitch and was willing to offer an office space for the company and several other benefits. And thus, the wheels of Cramstack started rolling.

I personally know GP accelerator gave Cramstack a platform. Could you talk briefly about that for new startups?

BI tools essentially derive information from data. Since, enterprise data come in huge volumes, BI tools are used to get proper and timely insights from the data

In April 2016 we participated in the Grameenphone Accelerators event. Still did not know what exactly we will do but we had a broad picture. We were interested to do data mining, especially with social media data. But that was a failure on some parts. As I was saying, the social media data is very problematic because in most cases they are incomplete and vague and in other cases there are heavy licensing issues. So, we moved away from social media related data.

So, moving away from that plan, we tried to use natural language processing in Business Intelligence and we hit gold! We shower a proof of concept in GP accelerator and upon providing a solid business model, they were more than happy to partially fund us.

"I think pitching and writing business models should become integral parts of the academia at this day and age."

How was the transition like from NSU to the real world? And, what contribution did NSU play in your success?

With a smile I had to take two extra semesters in NSU as we were the first batch that took upon Capstone Projects. My supervisor Dr. Shazzad Hosain (glad to hear, he is the Chair now) always taught and inspired us to solve real world problems that not only benefits the public but is lucrative as well.

In 499B, we started pitching our company (project at that time) and we received the highest mark in December 2015 among all Capstone Projects that semester. I am truly indebted to NSU ECE for their continued support. I still visit here as you know, since I come to meet you, Shazzad sir and several others for advice and recruits. I wouldn't say that I could be here, had it not been for an eye-opening curriculum set forth at NSU.

What is a Business Intelligence tool?

BI tools essentially derive information from data. Since, enterprise data come in huge volumes, BI tools are used to get proper and timely insights from the data.

We did some research and found out that there are some issues with BI tools as well. Using a BI tool requires multiple layers of interactions. For business executives to get information out of enterprise data, they need to go through IT people to place a request. The IT guys can take multiple days to comply with the requests and still deliver irrelevant information.

Using a regular BI tool also requires technical programming language knowledge. So we thought, why not create a natural language interface for getting data instantly for all sorts of users?

What makes Cramstack different from other data companies?

The difference between Cramstack and any other BI company is that our platform can be used by anyone. It's like Google for enterprise data. There's a search bar and you can search for your data in plain language and get instant queries. We are using an artificial intelligence-driven natural language search bar for data mining. We eliminate all the layers that usual BI tools require. That includes extra personnel, time, and effort.

You can get an upper hand against your competitors by making precise and quicker decisions than others. With Cramstack, executives can do exactly that.

Tell us about some of your recent accolades

We recently became the Digital Winners from Bangladesh hosted by Telenor in 2017. We were in the top 10 product pitch in slush in Singapore at that event internationally.

The latest one is quite huge, I must say. We got invited to Google Entrepreneurs Startup Grind in Silicon Valley, CA, United States. The process was: first we applied and there were over 8000 companies globally vying for a spot there. After that we had to pitch our product among those 8000 companies and we got selected in the top 20 globally.

How is Bangladesh doing in terms of data?

Bangladesh is slowly heading towards automation. Once



automation is fully complete, they can make the best out of data-driven decisions. There are a few companies that have digitalised themselves already. We are working with these companies to help them make better business decisions.

The culture in our country is to make executive decisions based on intuition and experience, which is obviously not going to change overnight. We are allowing the companies access to our platform and try it out. They evaluate its use and appeal and then can come on board as our clients.

We know BI has immense potential in the business process and can be a groundbreaking solution for handling data. We are allowing our clients enough time for their businesses to adapt to this new data-driven culture and offering them the opportunity to be the first ones to adopt it.

Who do you figure are your competitors?

Right now, we are mainly targeting the South Asian region. Our main competitors are Power BI by Microsoft and ThoughtSpot. These platforms are focusing on the Western regions. That's why we are working in South East Asia, mainly the market in Singapore. In a sense, all data companies are our competitors.

Currently, we provide a data analytics platform; a data collection platform, so companies can have processed data from the root level; and a data preparation service, turning the unstructured data into structured data. We also have a data science team working on predictive analytics and deep data insights.

What are your future plans?

Our main goal is to be a 360-degree data company. We want to automate data processing and analytics with natural human interaction. We are working to build a data-driven culture in Bangladesh, and in South East Asia, we want to provide a fully automated data processing system in the next five years.

NSU SEPS
Welcomes the new
Dean Dr. Arshad
M. Chowdhury in
Spring 2018



Dr. Arshad M. Chowdhury, Professor of Department of ECE had been appointed the position of the Dean of School of Engineering and Physical Sciences (SEPS). He has finished his PhD from Georgia Institute of Technology, one of the top ranked engineering universities in the world.

The school heartily welcomes the new Dean – Dr. Arshad M. Chowdhury.

NSU ACM Student Chapter Innovation Challenge Season 3

“Idea Generation” has been the traditional kick starting event of Innovation Challenge which has the goal of providing students better insight to current scenario of tech industry and corporate demands of computing world.



NSU ACM Student Chapter had successfully arranged the third season of its signature event ‘NSU ACM SC Innovation Challenge’ on Fall 2017. This event was jointly organized by the Department of Electrical and Computer Engineering, North South University and NSU ACM student Chapter.

“Idea Generation” has been the traditional kick starting event of Innovation Challenge, which has the goal of providing students better insight to current scenario of tech industry and corporate demands of computing world. With this noble aim, this session included speakers from industry, who are successful entrepreneurs in our tech industry and faculties of engineering discipline of NSU. This session took place on October 21st, 2017 at NSU and it was supported by Bangladesh Innovation Forum.

On December 18th, 2017, the second phase of Innovation Challenge – ‘Project Showcase’ took place on North South University premises. This session was gladly supported by GP Accelerator, one of the countries forefront

organization in supporting start-ups from youngsters.

At this phase, the final year students of Electrical and Computer Engineering department, NSU, formally demonstrate their projects as a part of their coursework. 28 teams took the courage to compete in Innovation challenge with their product. These teams faced the judges of Innovation Challenge and through a formal and fair competition; teams winning the top three positions got rewarded according to the declared token of appreciation from the hosting organizations. Along with the prize money of BDT 10000/=, 6000/= and 4000/=, the winning teams are promised to receive GP In house training and will be given priority in GP Accelerator Start-Up later on.

The respected judges for ‘Project Showcase’ were - Kazi Mahbub Hassan, Head of Transformation, Grameenphone, Shawkat Hossain, Managing Director, BD Venture Limited, Dr. Rajesh Palit, Assistant Professor, Department Of ECE, NSU and Dr. Lamia Iftekhar, Assistant Professor, Department of ECE, NSU.

A Warm Welcome to our New Faculty - SEPS

Department of Mathematics and Physics

Dr. Preetom Nag
Assistant Professor
PhD, Hokkaido University, Japan

Dr. M. A. Masud
Assistant Professor
PhD, Kyungpook National University, South Korea

Department of Architecture

Dr. Mohammed Zakiul Islam
Professor
M. Arch, University of Texas, Austin, USA

Ph.D, North Carolina State University, USA

Sujaul Islam Khan
Senior Lecturer
M. Arch, Washington University in St Louis, USA

Aida Hassan
Junior Lecturer
B. Arch, Southern California Institute of Architecture, USA

Alia Shahed
Junior Lecturer
B. Arch, Bangladesh University of Engineering and Technology, BUET

Rishaad Mohammad Yusuff
Junior Lecturer
B. Arch, North South University

Department of Electrical and Computer Engineering

Dr. Mohammad Abdul Matin
(humbling NSU by returning after his sabbatical)
Associate Professor, PhD (Newcastle University, UK)

Dr. Shahnewaz Siddique
Assistant Professor
Phd. Aerospace Engineering, Georgia

Institute of Technology, USA.

Syed Athar Bin Amir
M.S., Columbia University, USA.

Ashfia Binte Habib
M.Sc. Wichita State University, KS, USA

Rishad Arfin
M.A.Sc. McMaster University, Canada

Zunayeed-Bin-Zahir
M.S., The State University of New York at Buffalo, USA

Neethila N. Poddar
M.S., University of Calgary, Canada.

Out of all these projects, the team that succeeded to win the title of the day was “Bengali Handwriting Recognition and Conversion to Editable Text” and the team members are Md Shafiqul Islam, Farhan Rahman Wasee and Sadia Chowdhury. The 1st runners up position went to two teams ; “Smart and compact electrical appliance management system, along with power regulation and monitoring features using high voltage” presented by Noor Al Din Ahmed and Rahatul Aine and “Analysis of sickle cell anemia semiconductor devices”,

presented by Syeda Tazrian Noor, Tarneem Islam and Muhtadin Binte Khorshed.

Pro- VC of North South University, Dr. G U Ahsan handed over the prizes to the winning teams .Also, dean of SEPS, Dr. Arshad M Chowdhury was present at the prize giving ceremony. The event ended with a big round of applause for the winning teams and GP Accelerator was happy to announce their promised offer to the teams as to provide them GP in house training and these teams will be prioritized in GP Accelerator Start-Up.

NSU’s premier Robotics team - ‘Hau Mau Khau’ has racked up an impressive array of wins

Hau Mau, NSU’s premier Robotics team, have racked up an impressive array of wins in the past few months. Originally formed as an initiative to improve Robotics within NSU through self-learning and experimentation, Hau Mau is now a major contender in Robotics on a national scale, holding a booth at Digital World Bangladesh and participating in a myriad of contests all over the country.

The members of Hau Mau are: Asif Ahmed Nelay, Mahmudur Rashid Aurko, Md Aowrongajab Uday, Shoriful Islam Sumon, Monzurul Islam Uchchahs and Julhas Hossain



Their list of recent achievements include:

First Place in Megabots Contest in Technovation, by at NSU by ACM-SC. Runner-Up in IEEE-Day Hackathon, by IEEE NSU Student Branch. Runner-Up in RoboRiot in Meceleration, held at IUT by IUT MCE. Runner-Up in EON: Spectral Shift 17’s Robowars, held by Rajuk College Robotics Club.

PowerBuzz 2018

‘Making Bangladesh a role model in the world by using sustainable energy production and management’



POWERBUZZ-2018, is not just a Mega-event but a chapter, a story of countless people’s hard work, dedication and teamwork, a journey for all individuals coming from different parts of the country and at the same time a grand stage and a battleground to prove themselves and survive among the best of the best, that includes not only their incredible competitors but also the extraordinary

judges who took things to a new level of adventure. The event was held on February 9 and 10, 2018 organized by



IEEE North South University Student Branch, Power and Energy Society. It took place in the North South University premises. The main theme of the event was ‘Making Bangladesh a role model in the world by using sustainable energy production and management’. Altogether the event consisted of five segments, which included three

“Leveraging Technology for a Better Tomorrow”. IEEE Day Celebrations



Dr. Rezaul Bari, former Chairman of ECE Dept. leaving his best wishes on the doodle board

IEEE Day is a global event that celebrates the anniversary of the first time IEEE members gathered to share their technical ideas in 1884. It is a day to celebrate IEEE members! Every year, this day is celebrated based on a special theme and for 2017, the theme was: “Leveraging Technology for a Better Tomorrow”. IEEE North South University Student Branch (INSB) formed a team which consisted of volunteers, young professionals and staff, who all worked together in order to make the celebration bigger than ever.

A two-day long celebration took place on October 8 and 9, 2017, which consisted of a number of events. A recapitulation of all the events organized by INSB for this celebration would include: Football Fiesta, IEEE Promotional Fair and Membership Drive, Photo Exhibition, Hackathon, Flash Mob, Power IQ, Session on Higher Study Opportunities, HAC Session and Tech Talk.



The honorable Minister, Mr. Zunaid Ahmed Palak receiving the token of appreciation from the Vice Chancellor of NSU, Professor Dr. Atiqul Islam

Mr. Zunaid Ahmed Palak created an enthusiastic ambience through his inspirational and engaging talk

Mobile Site Developers Day organized by Google and co-hosted by IEEE, NSU draws to a close successfully

The gala event, ‘Mobile Site Developers Day’ jointly organized by Google Developer Group (GDG) Sonargaon and supported by Google Inc. and co-hosted by IEEE North South University Student Branch was held on March 18, 2018. The event was aimed for developers who were interested in Google’s new technology, tools and open-source platform. It includes details of web, Android, Chrome, Drive and Google Cloud platforms, product APIs like the Cast API, Maps API and YouTube API, also open source platforms like TensorFlow, Firebase, PWA and many more.

GDG Sonargaon arranged the Mobile

Sites Certification Training and Exam (mSite) for more than 15 universities across Bangladesh. Around 500 engineering students participated in the mSite exam through the program and from them, more than 370 students passed the exam and got certification.

IEEE NSU Student Branch also organized an event named Google’s Certification for Mobile Site Developers supported by Google Developers Group Sonargaon on February 19, 2018. Around 48 students participated in this workshop. The instructor for this workshop was Imtiaj Ahammad, Google MSite Certification Instructor, Google Developers Sonargaon.

Participants were needed to pass the Mobile Sites exam to become certified Mobile Site Developer. In this workshop, the participants learnt from the experts at Google Developers Group. Around 48 participants from

NSU took part in this event.

It is a pride to mention that Bangladesh has the highest number of mSite developers in South-East Asia. To celebrate this massive achievement, Mobile Site Developers Day, hosted by GDG Sonargaon in collaboration with IEEE North South University Student Branch.

The event consisted of dynamic sessions where professionals of the IT sector of Bangladesh shared their experience and knowledge with the participants. The honorable Minister of State for Information and Communication Technology Division, Bangladesh Mr. Zunaid Ahmed Palak created an enthusiastic ambience through his inspirational and engaging talk. The Vice Chancellor of NSU, Professor Dr. Atiqul Islam also graced the event with his presence.

“Branch Counselor of INSB, Tanjila Farah receiving the mSite certificate from the honorable Minister, Mr. Zunaid Ahmed Palak.jpg image goes here”.

4 Crore BDT in research funding in the fiscal year 2016-17

a vision to elevate NSU to one of the top research universities in the world.”

North South University's Honorable Vice Chancellor, Pro-VC, Treasurer, academicians and policymakers made an outstanding feat by disbursing over 40,000,000 for academic research. This is the highest amount among all private universities in Bangladesh.

Initially the proposals were collected and peer-reviewed and the successful applicants were disbursed a lump sum to pursue research – a vision to elevate NSU to one of the top research universities in the world. The event took place in November 2016.



Research Grant Ceremony with VC, Pro-VC (D), Treasurer, All Deans and Academicians

As per SEPS Newsletter, there has been more than 120 scholarly conference papers and highly reputed journal papers already published thanks to this initiative.

Public Speaking Competition won by a ECE student

“Let your voice make a difference.”

Public speaking is a talent a student requires no matter which field he/she is in. It is one of the most admirable, yet frightening tasks one can accomplish. In fact, there's a term specifically for the fear of public speaking known as “glossophobia”. The stares of the audience are enough to unnerve anyone, even the most seasoned of speakers. Being an expert in public speaking takes courage, bravery, and practice. Kazi Ayesha Rahman, a student of the ECE Department has conquered this competitive platform and set a remarkable benchmark in November 2017.

NSU Communications Club organized Masquerade Medley, which was an intra-university event. The public speaking segment had about 200 applicants. The competition had 3 rounds encompassing prepared and impromptu speeches. The final round had 5 students from various departments, and the criterion was to perform a



Dr. Katherine Li handing out a cheque of BDT 25,000 to the winners

prepared speech. The topic was, “Let your voice make a difference.” The judge was our very own Director of External Affairs, Dr. Katherine Li. After a climactic battle amongst the top 5, Kazi Ayesha Rahman was declared a champion. She triumphed with a cheque worth BDT 25,000 and the glorious title of the best public speaker in North South University.

NSU ECE showed stellar performance in Grameenphone Next Business Leader

connecting people and watching the smile while they talk with their relatives who live overseas make it worth to be a part of that family

Grameenphone's Next Business Leader is a Management Trainee program designed to offer a fast-track career to talented fresh graduates where they can grow and become leaders for the future. They will have the opportunity to work in roles that are currently prevalent and critical in nature not only in the telecommunications industry but for most dynamic organizations. IEEE NSU Student Branch, Women in Engineering Affinity Group (INSB-WIE AG) took

great initiative to organize the Grameenphone Next Business Leader (NBL) on November 28, 2017 in North South University.

The Branch Advisor of INSB, Tanjila Farah, Lecturer, Department of Electrical and Computer Engineering of North South University and INSB-RAS Advisor Dr. Lamia Iftekhar, Assistant Professor, Department of Electrical and Computer Engineering of North South University were

present throughout the session. First speaker, Sazzad Hasib while sharing his experience with working in Grameenphone said that connecting people and watching the smile while they talk with their relatives who live overseas make it worth to be a part of that family. Our second speaker Farhana gave a look into what we can expect from Grameenphone in the future. She said that from connecting people to being the most preferred life style partner by providing the best quality services, Grameenphone is always adapting and growing. Mr Arafat is an Engineer, working in the Grameenphone IT department pointed out that Engineers have a mindset, which needs slight tuning. We have to empower society

through Digitalization, Innovation and Disruption. His question towards the audience was “Have you got what it takes to DID it?” The final speaker was Zunaid and he explained thoroughly what the program is about and he said if anyone got any innovative ideas then they are here to provide a platform, if anyone wishes to accelerate his/her career, then they are here to mentor and coach them and if anyone wishes to be a part of a digital transformation then they are here to assist them.

Then three past winners of NBL who are also North South University alumni joined the stage with the other speakers for the Question-Answer session and with that the event came to an end.

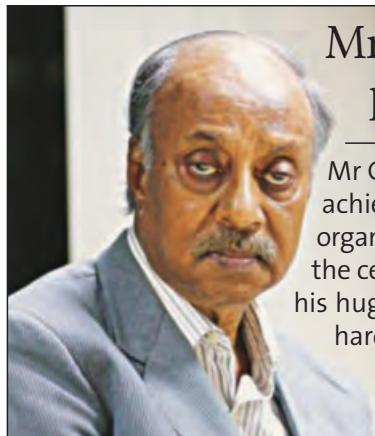
20 years celebration of NSUAPC

North South University Art and Photography Club has recently achieved a milestone of 20 years. Since its birth in 1997, the young photographers of NSUAPC have been working hard to expose photography nationally and globally and they have been successfully going at it for 20 years. In celebration of this milestone, NSUAPC arranged a ceremony with a small photography exhibition where they invited all their alumni and a renowned photographer Padma Shri Pablo Bartholomew as the chief guest to share in their moment of immense joy. Pablo visited the exhibition and was impressed with the capabilities of the amateur photographers of NSU. When asked to share his thoughts he expressed his opinion about how a moment can be framed using not



From left: Shahriar Iqbal Raj, Faisal Ahmed, Padma Shri Pablo Bartholomew, Parisa Shakur and Nyeem Ahmed

only a single photograph but using multiple ones.



Mr. Golam Mostafa awarded prestigious Ekushey Padak

the hardships and struggles that he faced and how it all rewarded him in the end

Mr Golam Mostofa, faculty of Department of Architecture at North South University, has achieved the first Ekushey Padak in Photography. In honor of his achievement, NSUAPC organised a ceremony to congratulate him on his success as a lifelong photographer. During the ceremony, he was awarded with an honorary crest and asked to share his thoughts on his huge achievement. Mr Golam Mostafa spoke about his entire photography career, the hardships and struggles that he faced and how it all rewarded him in the end. His speech moved everyone present in the ceremony and was very encouraging for the young photographers of NSU.

Dr. Shazzad Hosain is appointed the new Chair of ECE effective from Spring 2018



The department of Electrical and Computer Science (ECE) honors the very deserving new Chair – Dr. Shazzad Hosain in Spring 2018. Having a plethora of academic skills and prowess in his arsenal, the department looks on positive changes during his tenure. The school, as a whole congratulates Dr. Shazzad Hosain on this momentous achievement.

Glorious 21st Convocation of North South University

On February 17, 2018, North South University proudly arranged the 21st convocation, when NSU started back in 1992 and maintained scholastic excellence.

This year, 2785 graduating students, 1918 are from undergraduate programs and 867 from graduate programs. This is the largest convocation till date for NSU. 56 students received the honor of Summa Cum Laude, 63 received Magna Cum Laude and 139 students received Cum Laude awards.



Three students received gold medals from SEPS

Pinku Debnath-Valedictorian

Pinku dreamed of reaching for the stars and so he did. That dream realized at NSU.

Department of Electrical and Computer Engineering (ECE). Recipient of the Chancellor's Gold Medal Award.



He was a regular student in high school with a keen knowledge of mathematics. Pinku dreamed of reaching for the stars and so he did. That dream realized at NSU. Pinku mentions, "The primary motivation for his success in NSU was his participation in competitive programming contests such as ACM. He has not only reached immense success in those arenas but they compounded his academic success. Pinku suggests everyone to follow a passion besides academic study and consequently, the academic success will follow. He is now planning on pursuing higher studies in US or Canada."



Anika Tasnim

Department of Electrical and Computer Engineering (ECE). Recipient of the Vice Chancellor's Gold Medal Award.



Sayma Shammi

Department of Electrical and Computer Engineering (ECE). Recipient of the Vice Chancellor's Gold Medal Award.



Dr. Nurul Islam

Dr. Nurul Islam was born in Netrokona and was a prominent faculty member at NSU. Suddenly he passed away on March 08, 2018. He had a strong academic

Eulogy

background with a Ph.D. in Statistics (1985) from the University of Calgary. His academic background also includes an M. Sc. (Statistics, 1981) from the University of Saskatchewan, Diploma-in-Statistics (ISRT, 1st class 1st, 1975), M. Sc. (1st class 2nd, 1974) in Applied Mathematics and B.Sc. (Hons, 1st class 1st, 1972) in Mathematics from the University of Dhaka.

Dr. Islam was an Associate Professor in the Department of Mathematics and Physics at North South University. Prior to joining NSU, he worked as a full time Continuing faculty at MacEwan University for about 15 years. He also taught a wide variety of courses in mathematics and statistics at University of Northern British Columbia,

Dalhousie University, Memorial University, National University of Singapore, University of Dhaka, Rajshahi University of Engineering and Technology (RUET) R&D Company as a statistician.

Dr. Islam had extensive statistical consulting experience with industry and academia in the planning, design, implementation, analysis and reporting of scientific research projects and in the design and analysis of questionnaires and surveys.

We, the NSU family members are shocked with his sudden passed away. May Allah grant departed soul for the eternal peaceful place Jannatul Ferdous, Ameen.