



DHAKA THURSDAY MAY 9, 2024, BAISHAKH 26, 1431 BS

A PUBLICATION OF The Daily Star

SCAN THE QR CODE TO ACCESS CAMPUS ONLINE



A career in DIGITAL MARKETING

Is it worth it in 2024?



ILLUSTRATION: SALMAN SAKIB SHAHRYAR



সেরা পণ্যে সেরা অফার

Digital Campaign 2024
Season-20

গনস্টপ মিলিয়নিয়ার

৩০ জনের পর এবার কারা হবেন মিলিয়নিয়ার!!

রয়েছে কোটি কোটি টাকার নিশ্চিত উপহার

শর্ত প্রযোজ্য



WALTON
Smart Fridge



ওয়ালটন প্লাজা, তাজপুর, ঢিলেট থেকে

ফ্রিজ কিনে ১০ লক্ষ টাকা পেয়ে ৩০ জন মিলিয়নিয়ার

স্নাকি বেগুন, ছুরী: খাসা মিষ্টি, বিভিন্ন রাইস দাড়া, আলুপুস, গিলেট



চৌধুরী ইলেকট্রনিক্স, পেনসিল, কুমিল্লা থেকে

ফ্রিজ কিনে ১০ লক্ষ টাকা পেয়ে ৩০ জন মিলিয়নিয়ার

মেয়: হামবুর সসলাপ, পিচা: অরু ছাত্তর, হানোইচর, লেপিকোর, কুমিল্লা



মেসার্স অফিস টেমপ্লেট, তেজগা, কামরাই থেকে

ফ্রিজ কিনে ১০ লক্ষ টাকা পেয়ে ৩০ জন মিলিয়নিয়ার

মেয়: আনিসুল ইন্ডাস্ট্রি, মিঠা: মেয়: বাতর আলি হাসান, রুশা, ৩৯গ

08000016267 (Toll Free) waltonbd.com

ক্রেতাদের ব্যাপক সাড়ায় মেয়াদ বাড়লো ৩০ জুন ২০২৪ পর্যন্ত। শর্তাবলি জানতে ভিজিট করুন: waltonbd.com/digital-campaign-20

MOVIES

GODZILLA X KONG

The New Empire

An action-packed monster flick

Contains spoilers

Set in 2027, the events of *Godzilla x Kong: The New Empire (TNE)* take place 3 years after its predecessor, *Godzilla vs Kong*. The film closely follows Jia, an orphaned girl of the Iwi tribe who was adopted by Dr Andrews, a linguist working for Monarch, with Kong.

The main plot of the film starts to take form as seismic activities in Hollow Earth cause Godzilla to start nuclear charging itself as a preemptive measure for an upcoming threat. It is later revealed that these disturbances are caused by Scar King, a giant ape with characteristics similar to that of Kong's species, but with a contrasting personality. Godzilla and Kong unite against Scar, leading to action sequence packed with beautiful CGI and fluid choreography.

To wrap it up, the plot won't blow your mind. But if you want to see a wrestling event consisting of giant monsters, *TNE* may be the perfect summer flick for you to enjoy with family and friends.



TV SERIES

FALLOUT

A new bar for video-game adaptations



Fallout expands upon the beloved and critically acclaimed role-playing game franchise, and successfully introduces it to a new audience.

Set in a retro-futuristic post-nuclear war America, the show primarily revolves around Lucy MacLean, a resident of an underground vault who goes on a quest out in the wasteland. While Lucy is the primary protagonist, the series follows multiple characters with parallel narratives which eventually intertwine.

While it does not quite nail the faction conflict and political intrigue from the games (particularly *Fallout: New Vegas*), the audience can get a decent understanding of the factions at play, despite a few timeline discrepancies.

A stellar addition to the canon of the franchise, you do not need to be well-versed in the lore of the franchise to enjoy the show.

OPPORTUNITIES



Fulbright Foreign Student Program

ELIGIBILITY

Four-year bachelor's degree

Minimum IELTS score of 7.0

Visit foreign.fulbrightonline.org to learn more

DEADLINE: MAY 15



Optimizely - Data Analyst

ELIGIBILITY

Bachelor's or Master's degree in Computer Science, Mathematics or equivalent

2+ years working experience as a data analyst

Technical expertise regarding data models, database design development, data mining and segmentation techniques.

Strong knowledge of and experience with reporting packages and databases

Knowledge of statistics and experience using statistical packages for analyzing datasets

Visit careers.optimizely.com to learn more

DEADLINE: NOT MENTIONED

BJIT - Intern (IT)

ELIGIBILITY

B.Sc. in CSE or EEE

Experience in and a fundamental understanding of basic networking, hardware, and software troubleshooting

Must have strong verbal, and written communication skills in English

CCNA, RHCSA, MTCNA certified is preferable

Visit bjitgroup.com to learn more

DEADLINE: NOT MENTIONED

Editor & Publisher
Mahfuz Anam

Deputy Editor of Features and Head of Content Marketing
Ehsanur Raza Ronny

Campus Team
Faisal Bin Iqbal
Syeda Afrin Tarannum
Fatima Jahan Ena
Abir Hossain
Amrin Tasnim Rafa

Photographer
Orchid Chakma

Graphics & Layout
TDS Creative Graphics

Production
Shamim Chowdhury

Send your articles, feedback, and opinion to campus@thedailystar.net
Find our content online at thedailystar.net/campus





STUDY ABROAD

Things to keep in mind for your grad school resumé

PUJA SARKAR

Throughout university, you probably made sure to build a strong resumé including good grades, research work, and gathering work experience to build your resumé for grad school. While all that certainly gives you an upper hand, your effort is wasted if you don't equally emphasise arranging and presenting your qualifications. This is where your resumé – what information you include and how you design it – comes into play.

Writing a resumé can be hard to master. When seeking advice, different sources will tell you different things. And, with time and the changing market, the unsaid requirements of resumé keep changing. When it comes to graduate school applications, there are some constant factors that are persistent across multiple institutions. Regardless of where you choose to apply, here are three key elements that your resumé should include:

Add a professional summary

Below your contact details, you should write a short and concise professional summary outlining any relevant experiences, achievement, and reasons for applying to graduate school, potential career goals, etc. Your summary should be a maximum of two to three sentences. Think of this section as an elevator pitch for your admission where you include unique skill sets and experiences

that would set you apart from other candidates. Slipping in why this graduate programme will be a boost for your career is essential while merging in what aspects make you a potential candidate.

Stick to one page

There's nothing wrong with doing more than the bare requirement. In fact, it's recommended when you're in such a competitive pool.

However, not all experiences and achievements need to be added your resumé. Choose the best accomplishments which will set you apart from the crowd and demonstrate your skill set to the fullest extent. Make sure to use action verbs when you describe what your roles demanded of you and what you accomplished.

It's highly advised to not go over one page. Additionally, everything you don't include in your resumé can potentially be points to touch on in your statement of purpose, which is where you add to your resumé and not restate it. Within a good margin, sections of your contact information, education, relevant work experiences, and social work is sufficient. If you have space in your one page, accomplishments and publications, and skills are the sections that should take priority.

Use a polished design and format

It might be tempting to pull out the latest eye-catching templates for your resumé. However, keep in mind that the admissions officers are going through hundreds of applications and the last thing they want to look at is an overdone resumé that's barely readable or one that's difficult on the eyes. So, note that simplicity is key. Keep your resumé simple and free of any unnecessary designs. Some universities will even tell you what kind of template to follow and provide samples. Additionally, more often than not, you don't need to include your picture. It's best to stick to a minimalist design with consistent formatting and visual appeal.

Every university and programme have resumé requirements with unique modifications. It's crucial that you cater your resumé to each program and present yourself as a potential and worthy candidate. It's not easy, and it might just come down to the finer details you put into the documents of your application. Good luck!



ILLUSTRATION: FATIMA JAHAN ENA

Funding opportunities grad school students can consider

Fellowships

Many organisations offer fellowships specifically for graduate students. These can be discipline-specific, such as those offered by professional associations, or more general, such as the Fulbright fellowships for international study opportunities.

Assistantships


Assistantships can include research assistantships (RA) or teaching assistantships (TA). These positions typically involve working with professors on research projects or assisting with undergraduate courses, and they often come with a stipend and tuition waiver.

Grants

Graduate students can apply for grants from government agencies, private foundations, and non-profit organisations to fund their research endeavours. These grants may cover specific research projects or provide general funding for graduate education.

Scholarships

Many universities offer scholarships for graduate students based on academic merit, financial needs, or other criteria. External organisations may offer scholarships for graduate study in specific fields or for students from underrepresented backgrounds.



BSRM FAST BUILD

To know more scan the QR code

WITH BSRM FASTBUILD
**YOUR HOME WILL BE BUILT ON TIME
 WITH THE BEST QUALITY RODS**

BSRM
 building a safer nation

■ INTERVIEW ■

BUET's journey to ICPC GLORY

A conversation with team coach M Sohel Rahman

AMRIN TASNIM RAFA

The team "BUET Potatoes", consisting of Kazi Md Irshad Farooqui, Md Sabbir Rahman, and Sk Sabit Bin Mosaddek, from Bangladesh University of Engineering and Technology (BUET) was crowned the Asia West champions at the International Collegiate Programming Contest (ICPC) World Finals 2023, held in Luxor, Egypt, from April 14 to 19, 2024.

In the global tournament known as the World Cup of competitive programming, the team secured a global position of 28 out of 124. In light of this historic achievement, Campus sat down with Dr M Sohel Rahman, a professor at BUET's Department of Computer Science and Engineering (CSE), Fellow at the Bangladesh Academy of Sciences, and team BUET Potatoes coach, to learn more about the process and experience of representing the nation as part of the BUET ICPC team.

Campus (C): How does it feel to have done so well in the 2024 ICPC with BUET?

Sohel Rahman (S): The feeling is extraordinary. When you go abroad, and someone even mentions Bangladesh, you automatically feel proud. When we



M Sohel Rahman (front, right) receiving the Asia West champion award alongside his team at the ICPC World Finals 2023

Solving the problems require very high analytical ability. You have to understand the problem, and what's in it, and then apply an algorithm to it.

became Asia West champions and they announced our (BUET's) name starting with Bangladesh, it felt very good to hear it in front of everyone. Our name is such, that just from the name you can tell that this is a Bangladeshi university and the number one university in Bangladesh. It is an extraordinary feeling.

C: Could you share what the BUET ICPC team selection process is like?

S: The CSE department leads this operation, but we also have gifted students who come from other departments and compete. We start from the very beginning. When new students come into BUET, we set up a camp and call for interested students across BUET, not just from the CSE department. Here, we give students a basic idea and rundown of competitive programming and programming contests. Then, the interested students arrive under our umbrella.

As we form the team, we try to evaluate and make sure the team is balanced. Suppose there is one student who has weaknesses in a particular algorithm, but he is very good at the other sides. When forming this team, we try to find another student who will complement team member one by not having the same weakness. Likewise, we ensure team member three doesn't have the same weakness as team member two.

C: Could you tell us how the team had to practice to come this far?

S: A dedicated ICPC committee, of which you may think of me as a representative, runs the training and coaching operations. Some BUET CSE alumni also dedicate a lot of time and effort to assist us in the training operations. We do this not without challenges. On the day we went, it was the final exam of one of our final-year students, Sabit. We had to talk to the authorities and get that exam shifted to a different slot. The ICPC journey starts in the regional contest. If we win that, we start training for finals.

C: ICPC is regarded as the World Cup of programming. For aspiring coders and participants, could you share an overview of the competition experience and how tough the competition can get?

S: There is a prevalent misconception that this competition is only about programming. Yes, programming is a big part of it, but so are problem-solving and analytical thinking. At the competition, you are given eleven questions and five hours to solve them. It is a two-step process – find a solution to a very difficult problem and then code the solution in.

Solving the problems require very high analytical ability. You have to understand the problem, and what's in it, and then apply an algorithm to it. Not only that, there is a time limit given to every problem, so when they run your solution code on the computer, it has to give you a solution within two seconds. If it takes more than that, you will have exceeded the time limit and your solution won't be accepted, even if it is correct.

My advice for someone who wants to do well in programming contests is to practise analytical problem-solving the most. They should be able to think from a solution angle fast when they encounter a

problem. They should also know coding very well due to the time limitations they are given, so that they can code their solutions within a short time.

They should also be of very strong character. At the competition, you are given one PC for a three-person team. If a teammate is using the computer and you have come up with a solution, you have to wait till they are done, under time constraints and a high-pressure environment.

C: Do you have any future ambitions for the BUET ICPC team that you would like to share with us?

S: In my opinion, the style of our academics doesn't emphasise analytical ability and problem-solving very well. This has created a scenario where students have to practise these skills besides their studies. For example, if a student is good at analytical problem solving, it would be automatically reflected in their results but it is not as the system of academics is very memorisation-centric.

But the situation is different, they have to study in one way, and then, to improve their analytical ability, they have to take separate preparation. Due to this, it becomes a bit difficult to cope with these things together. To graduate from BUET, you need to pass 40 courses, all of which require lots of memorisation. So, a lot of students who have a lot of potential and showcase all three characteristics I just described, may at one point decide that they can no longer continue competitive programming.

Therefore, my vision and mission are to find out how I may nurture these gifted students, so they can focus more on their interest in this, while also continuing their studies.

Amrin Tasnim Rafa is a sub-editor at Campus.

CAREER

A career in DIGITAL MARKETING

Is it worth it in 2024?

TAASEEN MOHAMMED ISLAM

Today, it's impossible to be on social media without coming across a reel, TikTok, or LinkedIn post from a self-proclaimed millionaire stating that digital marketing helped them "escape the matrix". As far as these millionaires are concerned, digital marketing is seemingly the key to taking 16-year-old high school dropouts and churning out big ballers blinging out in Dubai. Not to mention, it is allegedly a "straightforward and cheap" skill to learn.

In layman's terms, digital marketing is advertising and marketing through a digital medium using electronic technologies. From SEO optimisation to static banner ads, sponsored reels, and even affiliate news content, digital marketing uses many tools to capture customer attention. Thanks to the widespread prevalence of smart devices and social media usage, digital marketing is becoming ubiquitous with marketing as a whole. Having websites and social media pages is a must for businesses these days. Companies increasingly use viral marketing to generate more engagement and sales, resulting in the PizzaBurg rage bait memes and the unhinged Duolingo reels we know and love.

However, despite its adoption into the mainstream, digital marketing still has a few key differences from traditional advertising.

"Although generally a part of the marketing sphere, digital marketing offers a more extensive scope for experimentation and quick execution," says Maisha Tasnim*, a content marketing executive at a local marketing agency. "For instance, if something is trending at the moment, digital marketing allows you to jump on that trend almost instantly."

Now, why should you learn digital marketing? When asked how learning digital marketing benefits students, Ehfaz Nowman, a lecturer at the Department of Marketing and International Business at North South University, says, "Students gain hands-on experience by creating and managing real digital campaigns. They learn to use platforms and tools like Google Ads, social media platforms, and web analytics, all of which are used by companies worldwide."

Besides, learning digital marketing additionally encompasses learning data analytics, a key skill in the data-driven world we live in today.

So, let's cut to the chase – you've researched digital media and can't wait to start your digital marketing journey, but where do you start? All jobs have specific requirements, and digital marketing is no exception. Even though it should go unsaid, digital marketing requires foundational marketing knowledge. However, that does not mean you can't enter the field from other academic backgrounds.

"Picking up digital marketing from scratch is extremely easy," Ehfaz says. "There are plenty of free resources online and on YouTube. If you want a more structured education in digital marketing, browse Udemy, MasterClass, or Google Skillshop."

Ehfaz also explains how these courses and

certifications come with the added benefit of helping you brand yourself to potential employers.

Digital marketing careers are considerably more hands-on and demanding than other marketing jobs, always keeping marketers on their toes. Hence, individuals with good time management skills, negotiation, and multitasking abilities have the upper hand in this field. In terms of functional roles, digital marketing has many responsibilities, depending on your job role.

"You might be writing copies or captions, working with visuals, managing clients, handling social media, and so on," elaborates Minhaz Badhon, a former marketing executive at a local digital marketing agency.

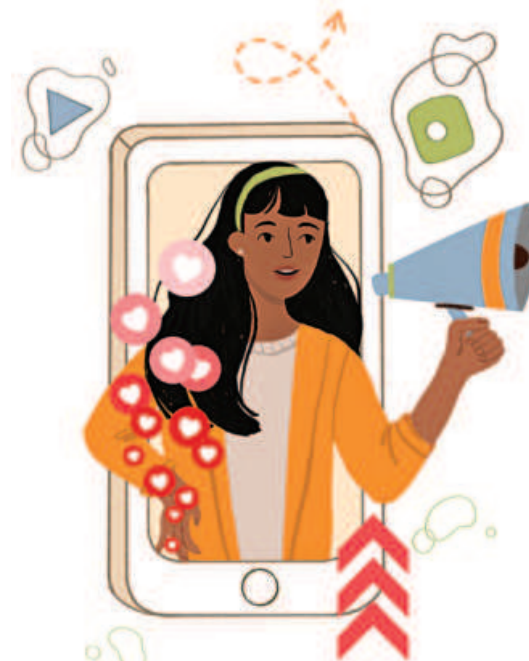


ILLUSTRATION: FAISAL BIN IQBAL

However, being such a dynamic and evolving field, digital marketing demands much more than being book-smart. Having ideation and visualisation skills and keeping up and adapting to current trends are vital skills required to thrive.

"If a challenge or a dance is viral on TikTok, and you're not strategising or building a marketing campaign around it instantly, you'll miss out on a lot of attention for the brand you're working with," explains Maisha. In a nutshell, you can say that digital marketing, emphasising social media management, entails being chronically online and addicted to the internet.

An important thing to note about this field is that you can embark on multiple career routes. The most common career route is through marketing agencies, which can either be traditional agencies or ones that specialise in digital advertising. These agencies act as third parties for large corporate clients and undertake most aspects of the client's digital marketing and branding activities. Agencies are generally very dynamic, dealing with a diverse roster of clients and projects, leading to exposure to an often chaotic yet

free-spirited working environment.

"You can't specialise at agencies for a specific product or company. Whatever comes your way, you must work with them accordingly," states Minhaz. Hence, working for an agency can entail extensive research into the client's branding and image.

On the other hand, in-house digital marketing jobs are much more streamlined and to the point.

"Unless the company is launching a new product, in-house marketing requires less research and adjustment since the brand voice is usually the same throughout all campaigns," says Minhaz. While lacking the adventurous flair of agency jobs, in-house marketing jobs are found in every corporate sector, from MNCs to telcos and pharmaceuticals, making them no less lucrative, at least financially speaking.

So, what about the local job prospects of digital marketing? Bangladesh has over 130 million internet users, and social media usage across all platforms averages 50 million active users, translating to prime real estate and tremendous untapped potential in pursuing a career in digital marketing. In recent years, many digital marketing startups, such as ADA and HypeScout, have dominated the sector, overshadowing many established industry veterans and reflecting the high local demand for digital advertising.

"Having worked in digital agencies myself, I remember spending hours convincing a brand manager of the benefits of using digital media and platforms. Now, brand managers look for agencies with digital marketing capabilities before working with them," says Ehfaz. Digital advertisements have also started evolving past static banners, becoming more dynamic and fluid with new technology, such as computer-generated imagery.

"There's a lot of potential, especially with all the new AR/VR technology we're seeing these days," says Maisha.

But, as with any innovation, bugs remain left to iron out, and implementing cutting-edge technology into people's daily lives is easier said than done. When asked, Maisha says, "Even though there will be a sincere effort to integrate these new technologies, assuming that agencies in Bangladesh can execute them easily would be wrong."

So, is a career in digital marketing worth it?

Short answer – yes. Long answer – yes, since you're already chronically online, you may as well monetise your screen time.

However, while it is a fulfilling and fun career route, it has a fair share of challenges, requiring considerable commitment and dedication. So, even if it doesn't make you a clickbait-y influencer, spending beyond your means, digital marketing is a future-proofed career path, reflecting evolving marketing practices and consumer behaviour patterns, with numerous current prospects and even more to come.

*Names have been changed upon request for privacy

Taaseen Mohammed Islam is a student at North South University.

NOTICE BOARD



Uttara University's "Infopedia" Poster Competition: A spectacle of knowledge and creativity

The Department of English at Uttara University recently organised a vibrant and intellectually stimulating poster competition titled "Infopedia". The event showcased the creative prowess and academic excellence of students from the 61st and 62nd batches of the department.

The competition, held on April 30 and May 4, featured themes centred around "United Nations" and "Island Countries" respectively. Taking place at the Multipurpose Hall of Uttara University, the event attracted a diverse audience eager to witness the insightful presentations prepared by the students.

On the inaugural day, the ambiance crackled with anticipation as Pro-VC Prof. Dr Gour Gobinda Goswami graced the occasion as the esteemed

Chief Guest. Alongside him stood a cadre of distinguished personalities, including the Treasurer, Registrar, and Exam Controller, all united in their support for the burgeoning talent on display. Not to be outdone, the closing day saw the stage illuminated by the presence of the Vice-Chancellor Prof. Dr Eaysmin Ara Lekha, accompanied by the university's revered Advisor Prof. Faez Mohammed Serajul Hoque. Their combined wisdom and encouragement served as a beacon, guiding students to push the boundaries of their creativity and knowledge.

Throughout the competition, participants displayed their ingenuity and knowledge through visually captivating posters. Topics ranged from global diplomacy and cooperation to

the unique cultures and challenges faced by island nations. The depth of research and creativity exhibited by the students left a lasting impression on the audience.

In recognition of their outstanding contributions, students were honoured with crests and certificates, symbolising their achievements in the field of academia and creative expression. The success of the Infopedia poster competition underscores the commitment of Uttara University's Department of English to foster intellectual growth and provide platforms for students to showcase their talents. Such initiatives not only enrich the academic experience but also contribute to the overall development of the student body.

Haileybury Bhaluka to organise first-ever fully residential five-day MIT Summer Workshop

MIT instructors are flying from the Massachusetts Institute of Technology to guide the workshop participants



Haileybury Bhaluka is going to organise a fully-residential MIT Summer Workshop from June 11 to 15, 2024. This pioneering initiative marks a significant milestone in the realm of educational collaborations, bringing together the prestigious Massachusetts Institute of Technology (MIT) and Haileybury Bhaluka to provide students with an unparalleled immersive learning experience.

Taking place on its campus in Mymensingh, the workshop aims to expand students' comprehension of engineering and design at an innovative level, fostering the creation of impactful solutions.

Haileybury Bhaluka has organised the workshop in association with MIT Edgerton Center at the Massachusetts Institute of Technology in the United States.

This workshop unveils the mechanics behind underwater robotics, AI-powered wheelchairs, and handheld pollution mapping devices, fostering innovation for impactful solutions. There is also an exciting opportunity to explore taking part in an underwater Harry Potter Quidditch competition.

The certificate will be provided by the Edgerton Center at MIT after the successful completion of the programme.

All school students in Bangladesh, boys or girls, aged between 11-16 years of age are eligible to participate the workshop. The students, however, are required to know English.

The students will stay for five days – check in on June 10 night and check out on June 15 afternoon.

There will be no scope to skip the nights and return every morning. It's mandatory to be present throughout the five days as many projects will require out-of-classroom interactions at any time of the day or night.

Daffodil International University celebrates outstanding achievements in the Duke of Edinburgh's International Award programme

Daffodil International University (DIU) organised a celebration of the achievements of its students in the Duke of Edinburgh's International Award programme on May 2 at "Professor Dr. Aminul Islam Seminar Hall". Distinguished guests, well-known award leaders, awardees, and students from different departments attended the event. The Duke of Edinburgh's International Award is a renowned worldwide structure for informal education and learning, motivating young people to have ambitious aspirations, acknowledge accomplishments, and make beneficial contributions to society. Since its establishment at DIU in 2013, the programme has experienced significant expansion, currently involving 49 enrolled students.

At the celebration, DIU stated with pride that 70 participants had successfully earned the bronze, silver, and gold awards. These accomplishments highlight the intense devotion and steadfastness of DIU's participation towards self-improvement and serving the community.

The main focus of the ceremony was the presentation of the bronze award to 13 outstanding young individuals for this semester. Mehedi Hasan Rabby, a student from the Department of Computer Science



& Engineering and one of the recipients, recounted their experiences, serving as a source of inspiration for both their peers and other attendees. Showrav Das, another bronze awardee and a student from the Department of Computer Science & Engineering who is currently pursuing a semester in the Erasmus Exchange Programme in Poland, also shared his experiences through video conferencing.

The ceremony culminated in the presentation of certificates and pins to the awardees. Prof. Dr M Lutfar Rahman, Vice Chancellor of DIU graced the event as the Chief Guest along with the Proctor of the university, Prof. Dr Shaikh Muhammad Allayear.

In the congratulatory speech, Prof. Dr M Lutfar Rahman commended the awardees for their outstanding achievements and encouraged them to continue striving for excellence and making a positive impact in their communities. Additionally, his encouragement to plant trees reflects a broader vision of social responsibility, emphasising the importance of environmental conservation and sustainable practices. In doing so, he not only acknowledges the individual achievements of the awardees but also emphasises their role as responsible global citizens, tasked with making a tangible difference in the world around them.

■ URC 2024 ■

MONGOL-TORI: PHOENIX

BRAC University's next-generation Mars rover

RITTIQUE BASAK

Mongol-Tori's Phoenix, a next-generation Mars rover from BRAC University (BRACU), has secured a spot in the finals of the University Rover Challenge (URC) 2024, which will take place at the Mars Desert Research Station in Utah. The rover, which might walk alongside human explorers on the red planet someday, can retrieve objects, complete autonomous traversal missions, collect visual data, perform planetary analysis, detect the presence of life by conducting biosignature tests, and help astronauts with equipment servicing.

The Mongol-Tori team is supervised by their advisor, Dr Md Khalilur Rahman, an associate professor at the Department of Computer Science and Engineering Department of BRACU.

"We can't forget our constant source of support, Dr Khalilur sir, our team advisor, for always being there for us and helping us whenever we need it," said Mongol-Tori's team lead Al Mahir Ahmed. Apart from the supervisor and team lead, the innovative minds directly associated with Mongol-Tori include co-team lead Sanzim Rahman Khan, and sub-team leaders Zaiyan Azad Moslem (electronics), Rafid Khan (network and vision), Sheikh Ayatur Rahman (AI and autonomous systems), and Samiha Tashin (science mission).

Al Mahir is responsible for all technical aspects of the rover, focusing on control and autonomous systems. His role involves developing and implementing algorithms and software architectures crucial for the rover's navigation, manipulation, and decision-making processes.

Sanzim oversees the mechanical aspects and team operations. He is essential to the overall development and operational preparedness of the rover, from engineering sturdy chassis and suspension systems to managing team-wide administrative and logistical responsibilities.

Zaiyan Azad Moslem oversees electricity distribution, circuit design, and protective systems. Using his knowledge of electrical engineering, he creates innovative methods to secure delicate electronics from environmental threats, maximise power efficiency, and guarantee dependable communication.

Sheikh Ayatur manages AI and autonomous systems development. Using cutting-edge machine learning algorithms and artificial intelligence approaches, he gives the rover the ability to sense its environment, process information, and come to wise conclusions on its own.

Rafid Khan takes charge of network and vision systems, ensuring rover communication and

visual processing. To provide smooth communication between the rover and mission control and to enable real-time analysis of visual data, he develops and sets up monitoring systems, image processing algorithms, and network protocols.

Samiha Tashin leads scientific missions, including data analysis and sample collection. She designs and executes scientific experiments, interprets data collected by onboard instruments, and coordinates sample collection efforts to gather valuable insights into Mars' geological and environmental characteristics.

This year, the newer Phoenix rover comes with several changes and features that make it stand out and is engineered in a way to excel in extreme missions in Mar's terrain. The team's commitment to

expanding the possibilities for robotic exploration is demonstrated by this new rover.

"The fresh new design takes inspiration from the phoenix bird itself and the red planet Mars, and most of the credit for the design goes to my co-team lead, Sanzim, and his design team," said Al Mahir.

With omnidirectional wheels and a strong rocker-bogie suspension system, Phoenix offers unmatched performance on a variety of surfaces, coupled with a user-friendly graphical user interface (GUI). Even in the most hostile Martian conditions, its

dual-band communication systems, which are precisely built for stability and increased range, ensure uninterrupted connectivity. This crucial component not only ensures reliable communication with mission control but also makes data transmission easier, which is necessary for successful mission completion and scientific analysis.

Phoenix's five-degree manipulator, an engineering marvel that enables unmatched precision in tackling complex jobs, is one of its most noteworthy enhancements. Its adaptability is further increased with the inclusion of omni-wheel steering, which allows it to navigate difficult terrain with unmatched agility and efficiency. The rover's sophisticated steering system makes it easy to manoeuvre in any direction, which makes it skilled at navigating difficult terrain. With the help of the Global Navigation Satellite System (GNSS) and the well-known Robot Operating System (ROS), Phoenix can perform autonomous navigation that raises the bar for robotic exploration. Phoenix's fundamental ROS allows it to adjust to changing conditions.

This year, at the URC, Phoenix achieved an outstanding System Acceptance Review (SAR) score of 87.38 out of 100, demonstrating its abilities in geological exploration and remote sensing. Phoenix showed an amazing ability to get into Martian surface materials with its Synthetic Aperture Radar (SAR) equipment and provide high-resolution, detailed photos of subsurface formations.

"We've faced all kinds of hurdles along the way, be it circuits burning, parts breaking down, and, every engineer's worst nightmare, a system that worked yesterday but stopped working today. We got

through it all with a lot of determination, hope, and sticking together, I really can't be grateful enough for my team, they're a beautiful bunch," said Al Mahir Ahmed.

Mongol-Tori's team members are confident and looking forward to emerging victorious at the upcoming URC 2024.



PHOTOS: COURTESY

Rittique Basak is a Campus Ambassador of The Daily Star from BRAC University.

■ OFF CAMPUS ■

Pro-Palestine protests in US CAMPUSES

The state of Bangladeshi and other international students

RAIAN ABEDIN

In universities across the United States, students, alumni, and even faculty members are adamantly protesting against the war in Gaza. The purpose of these protests has been to bring light to the complicity of these universities in “funding”, either directly or indirectly, Israel’s continued occupation. On the campus grounds where these students have set up solidarity camps, police officers have intervened, and even attacked and arrested hundreds of students demanding that these universities hold themselves accountable.

“Disclose, divest. We will not stop, we will not rest” has become a chant heard all throughout the solidarity camps at Columbia University.

But with the violence and the threat of arrest, suspension, or even expulsion these students face, their safety becomes a worry. For international students, in particular, these worries are heightened. The desire to fight for a humanitarian cause is of course there for these students, but their concerns are valid as well.

At Columbia, a university with a rich history of students protesting against the US’s injustices across the world, things have escalated to the point of wanton police violence. The Daily Star reached out to Aandishah Tehzeeb Samara, a second-year PhD student at Columbia, for further details.

“The sensitivity of our legal status is one of the biggest reasons why international students have been scared to participate in these protests. It’s not just the students, even the international faculty members have been really scared to raise their voices. The whole situation got to the point where the police would arrive and even attack the students while mediapersons were restricted from entry,” she says. “However, the protesters are organised in a way to ensure that American students, especially white students, are on the frontline, especially at times when arrests are being made.”

The problems faced by international students and faculty members at these universities don’t just begin and end there. According to Aandishah, threats of suspension from Columbia’s authorities are quite frequent; they have even gone as far as suspending many of their Palestinian students, some of whom weren’t even participating in the protests at any level.

“Columbia’s actions against the students have been very systematic. While not all of us participating in the encampment protests got suspended, we are still being threatened with suspension or worse if we don’t clear out the encampments. Some of the first people to get suspended have been Palestinians. Many of them weren’t even in the city when they got their suspension letters. They even placed New York City Police Department (NYPD) officers at every single entry point in the university and when they look at us international students, they do everything to make you feel unsafe and unwelcome.”

Nahaly Nafisa Khan, a postgraduate student at Virginia Tech, recounts the events that occurred at her university.

“Protests against this occupation have been going on since October of last year, but the encampment at New York University (NYU) and Columbia drove the student



PHOTO: DAVID SWANSON / REUTERS

organisations in support of Palestine in Virginia Tech to take action and set up an encampment. The protests themselves were peaceful but within a matter of days, we started getting reports of law enforcement officers threatening to take action against them. On April 29, the state police arrived and caution-taped the whole encampment spot and, within the next few hours, arrested many of the students and tasered this one student who wouldn’t comply with them.”

While the treatment by the police paints a dire image in itself, another thing of note is Virginia Tech’s treatment of international students, particularly Palestinians, who reached out to the Principal of Virginia Tech in the hope of a statement against the atrocity. “In reply to all those emails by the Palestinians, the secretary wrote a one-sentence reply that read ‘Thank you for your concern,’” Nahaly says, once again raising the question of where the allegiance of the university authorities lies if they are so adamant about their refusal to listen to their own students.

The undeniable hostility, ostensibly, spreads across most colleges in the US, but the one thing that fights back against it happens to be the community of protestors who all work together every step of the way. At Dartmouth, Adwiteeya Paul, a first-year undergraduate student, sheds light on the organised effort to keep international students away from harm.

“The Palestine solidarity coalition and other similar student organisations at Dartmouth have decided among themselves who are okay with being arrested and who are not. The international students try to stay with the group that would rather not get arrested, because of the repercussions it might cause,” Adwiteeya says, adding that over 90 students and a few

professors have already been arrested. Most recently, state troopers have also arrived to arrest students, an act which has driven the student workers union at Dartmouth to strike until the college President resigns. Amidst all this, international students attempt to keep themselves away from the centre of the encampment but are part of the movement, nonetheless.

The threat of violence and suspension may largely be uniform, but one group will clearly suffer more dire consequences than the other. At Yale, undergraduate student Nawal Naz informs The Daily Star about the presence of international students in the ongoing protests.

Nawal says, “International students (from Yale) are taking part in these protests, and one of them even got arrested and it’s highly likely that they will be deported. But most international students are not at the front lines – they are being extra careful.”

They also go on to add that there is an increased risk of pro-Israel “counter-protestors” doxing the identity of international students. “There is definitely more risk involved if you’re an international. Many of the students I’ve spoken to even choose not to attend for their own safety.”

Very recently, police have forcefully cleared out all the encampments at the University of California, Los Angeles (UCLA). They have made over 130 arrests, almost all of whom were students. Currently, The Daily Star is unable to confirm how many of them were international students, but the threat that looms over these young people asking for universities to not fund a genocide or war, is very much there. Despite their entire futures being on the line, the students seem to have no intentions of backing down.