Department of Computer Science and Engineering

Introduction

The Department of Computer Science and Engineering was the first Department established at UAP in 1996. The department is now thriving forward and its graduates are making positive contributions in this fast-growing field.

Vision

The Department strives to be in the lead in ICT innovation through excellence in education, research and development collaboratively with the growing industry.

Mission

The Department of CSE is committed to pursue excellence by applying and imparting knowledge of ICT to its students. Educational curriculum, research and collaboration between academia and industry are given highest priority. CSE, UAP aspires to produce graduates capable of taking leadership on the field of their best interest. We nurture graduates in:

- Understanding the basic principles of computational, electronic and modern technologies,
- Promoting creativity by applying their theoretical knowledge in practical problem solving,
- Enabling them to communicate ideas clearly and concisely both in written and verbal forms,
- Creating awareness about environment, social responsibility, and economic development within the ethical boundaries, and
- Engaging for further research or professional involvement.

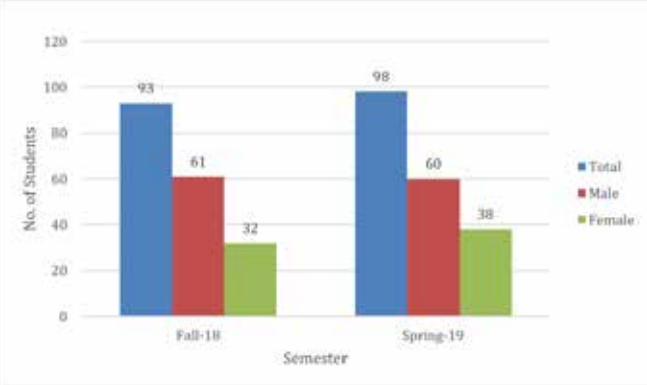
Academic Programs

Since its inception in 1996, the department has been offering undergraduate program in Computer Science and Engineering and later on in 2006 started offering graduate program. Following a bi-semester system, it requires 8 semesters to complete the degree of B.Sc. in Computer Science and Engineering and 3 semesters to complete the degree of M. Sc. in

Computer Science and Engineering.

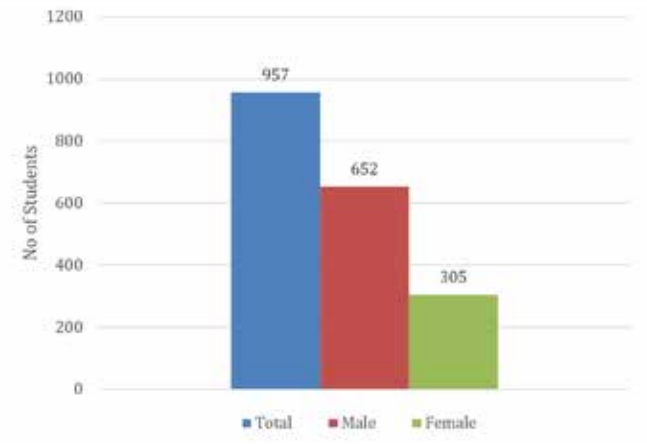
In-take Capacity and Admission

The Department maintains a full capacity of admission; in each academic session– Fall and Spring, about 100 students are admitted so that 26 full time and 10 part-time faculty members may give their best possible attention, both in-class and in-lab, to each of the students admitted for full capacity development of their potential. The admission process is highly competitive and admission test is required. Both in Fall and Spring, about 100 students were admitted filtered through admission test and oral interview. The average GPA of admitted students in undergraduate program in Fall is 8.93 and that of Spring is 9.03—the range being from 7.5 to 10 for SSC and HSC combined.



Number of Admitted Students in Fall-18 and Spring-19

In 2018-2019 academic years in Fall 2018 and Spring 2019, the total number of enrolled students in undergraduate program is 957 and in graduate program is 20. One-third of the total students in the Department are female.



CSE Total Number of Students

Department Facility

The goal of the Department of CSE is not only to teach students in classrooms to complete the degree but also to provide the latest configured computers and related facilities to ensure practical learning and to implement latest world technologies. The facilities in the department include state-of-the art classroom and lab facilities. The 8 (eight) lab facilities are available in the following areas: five outstanding computer programming labs with latest configuration, one project lab for final year students' project or thesis work, one digital lab, and one industry standard gaming lab established with the support from ICT division of the Government of Bangladesh. These labs are networked with each other and all other computers of the department through LAN. A short summary of the equipment facilities provided by department labs is given below:

Programming Labs

In programming lab 1, 2, 3 and 4, the department offers the students a total of 138 fully functional computers. All of these computers have intel core i-7 6700, 3.4 GHz processors, 8 gigabyte DDR-4 memory, 1 terabyte hard disk and both windows 10 and Ubuntu as dual boot operating system. Furthermore, programming lab 5 has a total of 29 functional computers with Intel core i-3, 3.4 GHz processors, 8 gigabyte memory and 500 gigabyte hard disk. All of this equipment are more than capable of providing the students a practical oriented learning experience.

Digital Lab

The department has a digital lab which has 8 functional computers with intel core i-3, 3.4 GHz processors, 8 gigabyte memory and 500 gigabyte hard disk. Moreover, this lab also provides students the necessary hardware tools such as circuit maker, micro wind, MDA microprocessor kit, Arduino and various logic gates and chips so that the students are able to turn their project ideas into reality.

Project Lab

The Department has a state-of-the-art project lab for final year students' project or thesis work which offers 20 fully functional computers with intel core i-7 7th generation, 3.86 GHz processors, 16 gigabyte DDR-4 memory, 1 terabyte hard disk and both windows 10 and ubuntu as dual boot operating system.

Game and Application Development Lab

Equipped with state of the art facilities with 10 computers with intel core i-7 7th generation, 3.86 GHz processors, 16 gigabyte DDR-4 memory, 1 terabyte harddisk, Mobile Sumsung S3, Tab Sumsung, Wacom Intuos, color printer etc. for game and application development funded by the ICT division of Bangladesh Government.

Faculty Members

The Department has a total of 24 skilled full-time faculty members. Among them, 5 faculty members have PhD from different reputed universities.

Dr Bilkis Jamal Ferdosi
Professor & Head
Ph. D. (The Netherlands)
M.Sc. (Germany)
B.Sc. (Jahangirnagar University)

Dr Md. Abdul Hamid
Professor
B.Sc. in CIE (Malaysia)
MS-PhD. CE (Korea)

Mr. Aloke Kumar Saha
Associate Professor
B. Sc. in APE (DU)
M. Sc. in CS (DU)

Ms. Shaila Rahman
Assistant Professor
B. Sc. in APE (DU)
M. Sc. in CS (DU)

Ms. Shammi Akhtar
Assistant Professor
M.Sc. Engg. (UAP)

A S Zaforullah Momtaz
Assistant Professor
B.Sc. Engg. (UAP)

Molla Rashied Hussein
Assistant Professor
B.S. (NSU)
M.Engg. (USA)

Nadeem Ahmed
Assistant Professor
B.Sc in CSE (DU),
M.Sc. (UK),
MBA- Finance (IUB)

Dr Nasima Begum
Assistant Professor
M.Sc. (JU); Ph.D. (Japan)

Dr Md. Rajibul Islam
Assistant Professor
B.Sc. (India);
M.Sc. & Ph.D. (Malaysia);

Md. Imran Bin Azad
Assistant Professor
MS in CSE (DU)

Tanjina Helaly
Assistant Professor
M.Sc. (USA)
B.Sc. in EEE (BUET)

Jahir Ibna Rafiq
Assistant Professor
B.Sc. (UK)

Dr A S M Touhidul Hasan
Assistant Professor
Ph.D.(China)
M.Sc. (China);
B.Sc. in CSE (SUB)

Abdullah Al Omar
Lecturer
B.Sc. Engg. (UAP)

Tahira Alam
Lecturer
B.Sc. & M.Sc (DU)

Md. Shopon
Lecturer
B.Sc. Engg. (UAP)

Nayeema Sultana
Lecturer
B.Sc. in CSE (DU)

Sakib Hasan
Lecturer
B.Sc. in CSE (IUT)

S M Rafiuddin Rifat
Lecturer
B.Sc. in CSE (RUET)

Tanmoy Sarkar Pias
Lecturer
B.Sc. in CSE (BUET)

Mahathir Monjur
Lecturer
B.Sc. in CSE (BUET)

Laboni Sarker
Lecturer
B.Sc. in CSE (BUET)

Md. Mohaiminul Islam
Lecturer
B.Sc. in CSE (BUET)

Faculty Creativity in Teaching-Learning

Faculty members always try to increase student engagement by using a learning inventory style with every student and designing lessons that address the different styles within their classes.

Faculty members engage themselves to improve the students' critical thinking and problem solving capability and help students persevere while struggling to learn new concepts.

In almost every courses conducted by the faculty members, *Google Classroom* is used as a communication medium among students and the course teachers. This is an online platform by Google where course teachers can post updates and start discussions regarding class materials, assignments and notices in topic-wise sections. Recently, the department has initiated collaboration with KJS Company Ltd. (Japan) and Japan International Cooperation Agency (JICA) to start using Think Board, a content creation and management system. This system is developed by KJS Company Ltd. and has been appreciated for its use in the *Information Technology Engineers Examination* (ITEE) for Bangladeshi undergraduate students to find career opportunities in Japan. The department has assigned a faculty member to use the system on experimental basis during Spring 2019 semester.

Best Practices and Areas of Strength

To enhance the quality of education even further, the department tries to maintain the following best practices which would help students to strengthen their capabilities:

The Department regularly organizes workshops, seminars and training sessions in collaboration with industry partners such as Samsung R&D, Leads Corporation, KJS Ltd. Japan, JICA, and the like to make the students ready for their profession.

Students do industrial training when they are in third year second semester. Through this training the students are able to learn about the working environment and practical experience of the computer industry. Hopefully, this practice will reduce the gap between academia and industry, and will increase the prospects of jobs for our students.

The Department nurtures students by offering regular competitive programming classes and ensuring their participation in different online and offline programming contests in order to increase their excellence in programming. A legendary personality like Prof. Dr. M. Kaykobad regularly meets our students to encourage them in programming.

The Department has established a high-profile Application and Game Development Laboratory in collaboration with ICT division of Bangladesh government to win the job race in the field of ICT especially in Application and Game Development which is one of the top upcoming multi-million-dollar industries. To avail the job market in VLSI design and fabrication, which is going to be one of the flourishing outsourcing industries in Bangladesh, we provide state of the art tool named "Cadence" which is highly used in this industry.

The Department regularly organizes different national and international level events such as the International Collegiate Programming Contest, ICCIT Conference, Hardware and Software Exhibition, etc. to increase the hands-on experience of the students.

It strives to thrive for ensuring quality education for our students by importing necessary educational equipment both hardware and software and by recruiting highly qualified faculty members on a regular basis.

The Department gives strong emphasis on research activities through conducting biweekly seminar on current research of the faculty members which is also open for the 3rd and 4th year Bachelor and Masters Students. Undergraduate and postgraduate students conduct high quality research under the supervision of the faculty members and regularly publish articles in international journals and conferences. This practice will not only increase the quality publications but also prepare the students for their higher studies.

To make students stress free and increase their social and communication skills, the department regularly arranges various activities like picnics, cultural activities, film and photography exhibitions.

Departmental Clubs

To encourage the students in all areas of life including curricular and co-curricular activities, the Department has been playing an exceptional role over the years. As for that reason the Department has the following 8 clubs: Computer Programming Contest Club, Career Development Club, Research and Publication Club, UAP Hardware and Software Club, Math Club, Cultural Club, Film and Photography Club, Sports Club.

Computer Programming Contest Club:

Programming Contest Club works on developing students' skills in programming and prepares them for various programming contests across the globe, especially the ICPC Programming Contest. Programming Contest club arranges coaching and workshops to improve the problem-solving ability of the students. Following are the few notable events organized by the club:

National IT Competition for Physically Challenged Youth 2019

On 22 June 2019, Department of Computer Science and Engineering (CSE) organized "National IT Competition – 2019 for youth with disabilities" along with ICT Division and Bangladesh Computer Council for the fourth time in a row. Close to 100 participants along with their guardians from all over the country visited UAP on that day and participated in four different disability categories.

National IT Competition for Physically Challenged Youth – One Girl (in purple) and one Boy (in yellow) at Hoisting the Inaugurating Balloons.

Mr. Zunaid Ahmed Palak, MP, State Minister, ICT Division was the Chief Guest . Mr. N M Ziaul Alam, Secretary, ICT Division was the Special Guest. Mr. Parthapratim Deb, Executive Director, Bangladesh Computer Council (BCC), Engr. Mohammad Enamul Kabir, Director (Training and Development), BCC, and other dignitaries from Bangladesh Computer Council, ICT Division, and of UAP attended the Seminar. The contest was successfully conducted under the supervision of the Programming Contest Club. Student volunteers (in white t-shirts in the photograph) from CSE department played a vital role in successfully conducting the competition.

Honorable State Minister, Mr Jumaid Ahmed Polak, MP speaking as Chief Guest at the National IT Competition for Physically Challenged Youth.

Glimpses of the Programming Contest at the Computer Labs of the Department ; Contestants with Visual Impairment (top) and Contestants with Neurodevelopmental disorders (bottom).

Inter Department Programming Contest 2018

Programming Contest Club of the Department organized the UAP Inter-Department Programming Contest 2018 on December 15, 2018. A total of 84 teams of two categories: Junior Category (first- and second-year students) and Senior Category (third- and fourth-year students) participated. Among them, 56 teams were from CSE department and 1 team from EEE department participated in the junior category and 22 teams from CSE, 3 teams from EEE, and 1 team from Civil Engineering department participated in the senior category. National Professor Dr. Jamilur Reza Choudhury, Vice Chancellor, UAP, graced the Prize Giving Ceremony as the Chief Guest. Prof. Dr. W. B. Poucher, ICPC Executive Director, Prof. Dr. Jeff Donahoo, ICPC Deputy Executive Director, and Prof. Dr. C. J. Hwang, ICPC Asia Regional Director were present at the event as Special Guests. The Champions, 1st runner up, 2nd runner up and Top All-Girls' teams of both categories received awards from the guests.

ICPC Executive Director - Prof. Dr. Bill Poucher, Deputy Director - Prof. Dr. Jeff Donaho, Asia Regional Director - Prof. Dr. C. J. Hwang visited UAP on 15 December, 2018 during their scouting team visit for 2021 ICPC World Finals in Bangladesh.

Career Development Club

The Career Development Club (CDC) helps the students to grow their skills for job market and prepare them for jobs in the industry. Following are the few notable events organized by the club:

Workshop on "The Future of VLSI Education in Bangladesh"

The CDC and the Department of CSE organized a seminar on VLSI education on 20 June, 2019 where Ms. Aliya Shafquat, Chip Designer, TAHOE who worked as a chip designer in Intel Corporation, USA, for 18 years, was the speaker.

Ms. Aliya Shafquat, Chip Designer, TAHOE – the main speaker of the seminar on 20 June, 2019.

Workshop on "Emerging Technology towards IT Career"

CDC Club in collaboration with PeopleNTech LLC organized this workshop for giving students knowledge on emerging technologies of recent times on 30 April, 2019. Mr. Roney Saha, Assistant Manager, PeopleNTech LLC was the speaker of this workshop.

Activation Campaign of "BPO SUMMIT BANGLADESH 2019"

An Activation Campaign was organized at UAP campus on 17 April, 2019 about "BPO SUMMIT BANGLADESH 2019". Later on, BPO Summit 2019 took place on April 21-22, 2019 at Pan Pacific Sonargaon, Dhaka.

How to Take Preparation for the Samsung R&D Institute Bangladesh Recruitment Test

Career Development Club of CSE organized a seminar on 27 January, 2019 on the subject of "How to Take Preparation for the Samsung R&D Institute Bangladesh Recruitment Test". This seminar was conducted by Mr. Ashraf-ul Asad who is currently working as a Chief Engineer in Samsung R&D Institute Bangladesh. Samsung R&D Institute Bangladesh (SRBD) started its operation in June 2010 and was officially inaugurated in February 2011. It is the first R&D hub of a multinational company in Bangladesh. The seminar helped the participants to know about the type of question and how to prepare well for taking recruitment test.

Seminar on "Knowing Leads Corporation and Prospective Internship Opportunity"

A seminar on *"Knowing Leads Corporation and Prospective Internship Opportunity"* was organized in collaboration with Leads Corporation Ltd. -- a leading software company of Bangladesh, in October 2018. Mr. Shaikh Wahid, Managing Director and CEO, Head of HR and other high officials from LEADS Corporation Limited was present in the seminar. They briefed about their company and had a very informative discussion with the students about career planning, job requirements, preparation for the future, recruiters' expectations and many more interesting topics.

Workshop on *"Grow with Samsung R&D Institute Bangladesh"*

A workshop was organized with Samsung R&D Institute, Bangladesh where the main speaker was Gazi Munir Uddin, Deputy General Manager - Head of HR, Samsung R&D Institute, Bangladesh (SRBD). The second speaker was Muhammad Ashraf-ul Asad, Samsung R&D Institute Bangladesh (SRBD).

KJS Award Ceremony

The Department signed a MOU with KJS Company Ltd., Japan - a well-known IT Education Company in Japan, with cooperation from JICA (Japan International Cooperation Agency), Japan and Bangladesh Computer Council (BCC), ICT Division, Government of Bangladesh. The main objective of this MOU is to implement and support the e-learning system developed by KJS Company Ltd, Japan at the Department. Under this MOU, KJS Company Ltd., awards the students who successfully pass the different level of ITEE examination.

KJS Award Ceremony for the students of CSE who passed the different levels of ITEE examination.

Research and Publication Club

Research and Publication Club of CSE Department is responsible to organize seminar/workshop activities on interesting recent research related work to encourage students. In addition, this unit handle the 4th year thesis/project related activities.

Seminar on "Research Methodology"

Research and Publication Club arranged a seminar titled "Research Methodology" on 29 April, 2019. The department faculty members were the speakers and the 4th year students who take thesis/project attended the seminar. The speakers went through the different phases of research in detail with hands-on training to efficiently perform in each of these phases. More than 130 students attended the seminar.

Seminar on "Human Computer Interface: Action with Advanced Technology"

Professor Dr. Jungpil Shin, from University of Aizu, Japan recently visited Department of Computer Science and Engineering, University of Asia Pacific. He has conducted a seminar on "Human Computer Interface: Action with Advanced Technology" on Sunday, March 24, 2019. The speaker talked about non-touch HCI using Motion gesture sensor, Gestural flick input-based character input system, Disease Diagnosis using Pen-Table. He also showed the recent activities of his lab which includes Character Generating based on human activities detected with sensors. A practical demonstration on how this character generator works was done. He later discussed about the future prospects of this technology and expressed his interest on research collaboration with the Department of CSE.

Dr. Jungpil Shin, Senior Associate Professor, Division of Information Systems, School of Computer Science and Engineering University of Aizu (UoA), Japan.

UAP Software and Hardware Club

This club aims to develop students' skills in software and hardware development and to produce marketable products. UAP Software and Hardware club conducts training programs for students to prepare them to develop different attractive hardware/software projects.

Inter-University Software and Hardware Carnival – 2018

The Software and Hardware Club of the Department of CSE organized the "Inter-University Software and Hardware Carnival – 2018", at UAP City Campus. Contestants from 20 universities participated with their projects in the daylong event. There were five segments in the competition: Software Exhibition, Hardware Exhibition, Line Following Robot Contest, Short Hackathon on "Rohingya Management System" and Cyber Gaming Contest. A total of 300 participants took part in the competition.

Inauguration ceremony of Hardware and Software Carnival 2018

Robotics Club

Robotics club arranges interesting sessions on modern robotics and reveals a new world of electronics and computer programming. In Hardware and Software Carnival 2018 the club organized the Line Follower Robot Competition. Line follower is an autonomous robot which follows either black line in white area or white line in black area. Robot must be able to detect particular line and keep following it. Around 25 teams participated in the competition, where 17 teams came from different universities. There were 3 rounds in the competition. The participants had to complete the 1st & 2nd round for qualifying to the final round.

Line Follower Robot Competition in Hardware and Software Carnival 2018

Math Club

The objective of Math Club is to help the students to build their logical thinking by solving math problems, to develop the problem-solving techniques of mathematical and programming analysis, develop the quantitative efficiency in programming and to build up mathematical modeling in problem solving. Members of CSE Math Club regularly participate in different national math Olympiads. In 2018-19 they participated in the 10th National Undergraduate Mathematics Olympiad (2018), 3rd Women's Math Olympiad (2019) and EWU Inter University Math Olympiad 2019.

Film and Photography Club (FPC)

This club motivates students to learn and share new ideas and techniques with fellow students having similar interests and imaginative power through film and photography.

Photo Competition and Exhibition: ViewFinder 2018

In each academic semester, FPC organizes a photography competition and exhibition named **ViewFinder.**

Glimpses of View Finder 2018 (left) Air Commodore (Retd.) Ishfaq Ilahi Choudhury, Treasurer, UAP, watching photos in the exhibition (right) National Prof. Dr. Jamilur Reza Choudhury is distributing prizes among the winners.

Cultural Club

The Cultural Club arranges cultural week in every semester to hunt talents in different cultural fields. In every semester there is a grand cultural show participated by the students and teachers.

Cultural Day 2018

In Spring 2018, competitions in different cultural fields were held in a day long program followed by an unplugged musical session. Pro-vice Chancellor Dr. M. R. Kabir was present as chief guest in the Unplugged Musical session.

Cultural Fest 2019

On 23 January 2019, a cultural fest was organized by the Cultural Club. The festival includes competitions in different cultural events like singing and art as well as a cultural program.

Pitha Utsab 2019

The students of third year arranged a Bengali traditional Pitha Utsab in CSE Department on 29 January 2019. The Head of the department and convener of Cultural Club inaugurated the program. All faculty members and students were present to taste different delicious pitha.

Sports Club

Sports club arranges sports week in every semester that includes competitions in different games like Cricket, Bad Minton, Table Tennis, Football, etc.

Study Tours

The Department tries to enrich the students' knowledge and desire to a higher extent through creating the opportunities to visit some ongoing big ICT related projects in Bangladesh. As a part of that, every year department arranges a study tour comprising of the senior students to see the amazing development project of Bangladesh Submarine Cable Company Limited located in Cox's Bazar. Bangladesh Submarine Cable Company Limited (BSCCL) is a Core Telecommunications service provider and International Submarine Cable Operator of Bangladesh. It is an IIG (International Internet Gateway).

Alumni Achievements

Bulbul Khan Monna, graduated in Fall 17 has a patent application in process based on his work titled "Development of Functionalities for Smart Phone and Power Share". He presented and published a paper on the Development of Functionalities for Smart Phone and Power Share in 4th International Conference on Green Computing and Engineering Technologies (ICGCET), August 2018, Aalborg University, Denmark.

Homeyra Akter, graduated in Fall 17, received the prestigious Monbukagakusho Scholarship in 2019 for pursuing Master's study at the University of Rhykyus, Japan.

S. M. Tanjilur Rahman, graduated in Fall 17 joined KJS Ltd., Japan as a software engineer in 2019.

Student Achievement

A team consisting of department students -- Imran Nazir, Rafat Jamader Maraz, Nahid ddin Ahammed, and Anauruzzaman was placed 2nd runner-up position in HACKATHON competition organized by Dept. of ICT, Bangladesh University of Professionals (BUP) April 2019 Dhaka.

Department Goals for the Next Year:

- An Industrial Advisory Panel (IAP) consisting of eminent industrialists and key employers in CSE field will be formed by the end of 2019. IAP will provide valuable ideas and insights of industry requirements to improve academic and research quality of the undergraduate and graduate programs offered by the Department as well as enhancing the employability of its graduates in national and international job market.
- Outcome Based Education (OBE) method will be fully implemented within 2020 so that the motto of providing quality education is fully realized.
- UAP plans to participate in 2021 International Collegiate Programming Contest (ICPC) World Final to be held in collaboration with ICT Division and BCC of Bangladesh Government. The Department is taking preparation for participating in this mega event of the country.

Publications of Faculty Members

A. Peer-reviewed Journal Papers

Akhtar, S., Monna, B. K., Ara, A. & Bhandari, P. (2018). Development of Functionalities for Smart Phone and Power Share. Indian Journal of Science and Technology, 11(27), 1–5.

Hasan, A. S. M. T., Jiang, Q., Chen, H. & Wang, S. (2018). A new approach to privacy-preserving multiple independent data publishing. Applied Sciences, 8(5), 783.

Hasan, A. S. M. T., Qu, Q., Li, C., Chen, L. & Jiang, Q. (2018). An effective privacy architecture to preserve user trajectories in reward-based LBS applications. ISPRS International Journal of Geo-Information, 7(2), 53.

Momtaz, A. S. Z., Ul, R. & Jahan, N. (2018). An Advance IoT based Road Traffic Manipulation System. Communications on Applied Electronics, 7(23), 1–5.

Niyigena, J. P., Jiang, Q., **Hasan**, A. T., Ziou, D., Chen, H. & Wang, P. (2018). ICT Usage and Attitudes Among EAC Undergraduate Students—A Case Study. IEEE Access, 6, 42661-42674.

Omar, A. A., Bhuiyan, M. Z. A., Basu, A., Kiyomoto, S. & Rahman, M. S. (2019). Privacy-friendly platform for healthcare data in cloud based on blockchain environment. Future Generation Computer Systems, 95, 511-521.

Rahman, S. S., Mahmud, H., Talukder, M. R., Daria, A. & **Akhtar**, S. (2018). A Machine Learning Based Approach for Diabetes Detection and Care in Bangladesh. Journal of Engineering and Technology, 4(2), 21–28.

Tarek, M. M. & **Ferdosi**, B. J. (2018). External Group Labeling of Objects in 2D Medical Images Using Spring-Mass Model. Journal of Biomedical Engineering and Medical Imaging, 5(2), 40-50.

Tasnim, R., Khan, S., Arshad, A. & **Hussein**, M. R. (2018). Non-Contact Capacitive Technique for Biomass Flow Sensing. Indonesian Journal of Electrical Engineering and Computer Science, 11(2), 531.

Zaini, M. K. A., Lai, M. H., **Islam**, M. R., Lim, K. S. & Ahmad, H. (2018). Cancellation of birefringence in DBR laser through principal axis offset by a rotation of 90°. Indian Journal of Physics, 92(8), 1045-1048.

B. Conference Papers

Ahmed, S., Islam, M., Hassan, J., Ahmed, M. U., Ferdosi, B. J., Saha, S. & **Shopon**, M. (2019). Hand Sign to Bangla Speech: A Deep Learning in Vision based system for Recognizing Hand Sign Digits and Generating Bangla Speech. Proceedings of the International Conference on Sustainable Computing in Science, Technology and Management, 26-28 February 2019, Jaipur, India. DOI: 10.2139/ssrn.3358187.

Al Imran, M., **Mridha**, M. F. & Nur, M. K. (2019). OTP Based Cardless Transction using ATM. Proceedings of the 2019 International Conference on Robotics, Electrical and Signal Processing Techniques (pp. 511-516). Bangladesh: IEEE.

Begum, N. & Nakanishi, T. (2018). Efficiency Improvement in Group Signature Scheme with Probabilistic Revocation. Proceedings of the 2018 International Symposium on Information Theory and Its Applications (ISITA), 28-31 October 2018, IEEE, Singapore. DOI: 10.23919/ISITA.2018.8664209

Ferdosi, B. J. (2018). Microscopy Cell Counting and Annotation Using a Max-Tree Representation of the Blood Cell Images. Proceedings of the 3rd International Conference on Biomedical Signal and Image Processing (pp. 61-65). Kitakyushu, Japan: Kyushu Institute of Technology.

Ferdosi, B. J., Nowshin, S., & Sabera, F. A. (2018). White Blood Cell Detection and Segmentation from Fluorescent Images with an Improved Algorithm using K-means Clustering and Morphological Operators. Proceedings of the 4th International Conference on Electrical Engineering and Information & Communication Technology (iCEEiCT) (pp. 566-570). Dhaka, Bangladesh: Military Institute of Science and

Technlogy.

Huang, Y., Jiang, Y., **Hasan**, T., Jiang, Q. & Li, C. (2018). A topic BiLSTM model for sentiment classification. Proceedings of the 2nd International Conference on Innovation in Artificial Intelligence (pp. 143-147). Shanghai, China: Association for Computing Machinery. DOI: 10.1145/3194206.3194240.

Haque, R. U. H., Mehera, P., **Mridha**, M. F. & **Hamid**, M. A (2019). Bengali Stop Phrase Detection Mechanism using Corpus Based Method. 8th International Conference on Informatics, Electronics & Vision (ICIEV), 30 May -2 June 2019, Eastern Washington University, Washington, USA.

Haque, R. U. H., Mehera, P., **Mridha**, M. F. & **Hamid**, M. A (2019). A Complete Bengali Stop Word Detection Mechanism. 8th International Conference on Informatics, Electronics & Vision (ICIEV), 30 May -2 June 2019, Eastern Washington University, Washington, USA.

Hu, Q., Li, C., **Hasan**, T., Li, C. & Jiang, Q. (2018). A collaborative caching strategy in contentcentric networking. MATEC Web of Conferences, 189, 03018. DOI: 10.1051/matecconf/201818903018.

Islam, M. R., Bhuiyan, R. A., **Ahmed**, N. & Islam, M. R. (2018). PCA and ICA Based Hybrid Dimension Reduction Model for Cardiac Arrhythmia Disease Diagnosis. Proceedings of the 2018 IEEE 10th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment and Management (HNICEM), 29 November – 7 December 2018, IEEE, Baguio City, Philippines. DOI: 10.1109/HNICEM.2018.8666331.

Li, Z. Q., Qiao, Y. C., **Hasan**, T. & Jiang, Q. S. (2018). A Similar Module Extraction Approach for Android Malware. DEStech Transactions on Computer Science and Engineering, MSO (International Conference on Modeling, Simulation and Optimization), 2018.

Mahmud, A., Adnan, M. A. & **Shopon**, M. (2018). An Incremental Clustered Gradient Method for Wireless Sensor Networks. Proceedings of the 2018 21st Saudi Computer Society National Computer Conference (NCC) (pp. 1-6). Saudi Arabia: IEEE.

Mridha, M. F., **Hamid**, M. A., Rana, M. M., Khan, M. E. A., Ahmed, M. M. & Sultan, M. T. (2019). Semantic Error Detection and Correction in Bangla Sentence. 8th International Conference on Informatics, Electronics & Vision (ICIEV), 30 May -2 June 2019, Eastern Washington University, Washington, USA.

Mridha, M. F., Hamid, M. A. & Asaduzzaman, M. (2018). Issues of Internet of Things (IoT) and an Intrusion Detection System for IoT Using Machine Learning Paradigm. Proccedings of the 2018 International Joint Conference on Computational Intelligence. 14-15 December 2018, Daffodil International University, Dhaka, Bangladesh.

Rahman, M. A., Shin, J., **Saha**, A. K. & **Islam**, M. R. (2018). A Novel Lossless Coding Technique for Image Compression. Proceedings of the 2018 Joint 7th International Conference on Informatics, Electronics & Vision (ICIEV) and 2018 2nd International Conference on Imaging, Vision & Pattern Recognition (icIVPR) (pp. 82-86). Japan: IEEE.

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C. Peer-reviewed Book Chapters

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