

► **Computer Science
Department**



NEWSLETTER
FALL 2019



COMSATS University Islamabad, Lahore Campus

Message From Dean

"I welcome you all on behalf of the Computer Science Department. In comparison to other disciplines, our students are getting more skillful in modern technology. We see our students as excellent programmers, researchers and analysts in the future. We are well aware of everyday breakthroughs in modern technology and thus are committed to equip them with advanced competencies to manage the growing needs of sciences and technologies. Our highly qualified faculty members ensure that you have a solid technical grasp on different subjects to apply this."



Message From HOD

"I humbly request faculty of computer science department to devote their full energy for preparing our students as successful citizens and computer science professionals that can face all challenges of life. The future of youth is in our hands and we should play our role to the best of our capacity. I also request my dear students to work hard and focus on their study. The field of computer science is very demanding but you require skills to compete with your fellows across the globe. Good luck to faculty and students for the next semester."

“Orientation seminar on Huawei ICT Competition”

Department of computer science Job Placement Committee conducted a seminar “Orientation seminar on Huawei ICT Competition” to guide the students and encourage them to participate in such international event. It was held on Wednesday 25, September, 2019 at 14:30 hrs in seminar hall A.

“Entrepreneurship and Technology Innovation”

A seminar on “Entrepreneurship and Technology Innovation” by Mr. Farhan Masood was held on 25th October 2019 in the department of Computer Science. This seminar was organized by Dr. Ghulam Rasool (Head, Department of Computer Science) and held in Lab GP. Mr. Farhan Masood is a self-taught Pakistan-born technology inventor. He has received 34 international and 5 local awards. These accolades include being the winner of MIT Enterprise Forum BAP 2012 and being cited by MITEF as one of the most brilliant minds in the world. Other than being a recognized technologist and innovator, Mr. Farhan Masood is well known for his philanthropic activities. He was recognized by the US Department of State as one of the most influential thought leaders on Twitter (2013). He is also the Founder and CTO of Sololnsight Inc. He is a pioneer in SaaS and cloud-based global recognition platforms.



“Incubation Program”

NSPIRE team conducted a seminar for 7th and 8th semester students on 20th November, 2019 in Seminar Room Block A. NSPIRE is Pakistan’s first Incubation Center launched by NETSOL Technologies, a Technology company. Their five months of Incubation Program is an amazing opportunity for Entrepreneurs / Startups to give wings to their ideas and take it to the next level.



“Artificial Intelligence Applications in the Aviation Industry”

A seminar on the topic of “Artificial Intelligence Applications in the Aviation Industry” was organized by Departmental Job Placement Committee. It was held on Thursday, 31st October 2019 in Seminar Room, D-Block.

“A Template-based Approach to Write a Research Paper”

A Technical and Motivational Research Workshop on the topic of “A Template-based Approach to Write a Research Paper” was organized by Dr. Rao Adeel Nawab. It was held on 7th November 2019 in Seminar Room, A-Block.

“Intellectual Property Rights”

A seminar on the topic of “Intellectual Property Rights” was organized by Dr. Usama Ijaz Bajwa. It was held on 21st November 2019 in Seminar Room, A Block.

“Build your career with Chinese social e-commerce”

A seminar on the topic of “Build your career with Chinese social e-commerce” was organized by Dr. Usama Ijaz Bajwa. It was held on 22nd November 2019 in Seminar Room, A Block.

“Robot which will be used is NAO – a Humaoid Robot”

A seminar on Robot Programming was jointly organized by Dr. Wajahat Qazi and ACM/IEEE RAS. Dr. Omar Mubin, University of Western Sydney, Australia was delivered information about the “Robot which will be used is NAO – a Humaoid Robot” on Monday, 16 Dec, 2019 at Seminar Room A.

PhD Research Seminars

The PhD Research Seminars of the following students were held on 2nd October 2019 in Department of Computer Science. Details are following:

PhD Scholar: Mubbashir Saddique
Supervisor: Prof. Dr. Zulfiqar Habib
Title: Robust Video Forgery Detection and Localization using Artificial Intelligence Techniques

PhD Scholar: Muhammad Nadeem Ashraf
Supervisor: Prof. Dr. Zulfiqar Habib
Title: Automatic Screening of Diabetic Retinopathy at Early Stage using Colored Fundus Images

PhD Scholar: Muhammad Ajmal
Supervisor: Dr. Farooq Ahmad
Title: Recognizing Different Human Activities from Unconstrained Videos.

“Balanced Life is Ideal Life”

Extra-Curricular
Activities

A seminar on topic of Balanced Life is Ideal Life was organized by faculty member of computer science department Dr. Rao Muhammad Adeel Nawab. It was held on Friday, 6 September 2019 in Seminar Room, A-Block.

“Kamal Kiya Hai? Hussan Ho Aur Nazakat Na Ho”

A seminar on the topic of “Kamal Kiya Hai? Hussan Ho Aur Nazakat Na Ho” was organized by Dr. Rao Muhammad Adeel Nawab on Friday, 1st November 2019 at Seminar Room, A-Block.

"INTERNATIONAL LOCAL HACK DAY: LEARN 2019 BY GITHUB AND MLH"

Workshops

The Department of Computer Science students arranged one day workshop on 12th October in labs of Computer Science department arranged one day workshop titled "INTERNATIONAL LOCAL HACK DAY: LEARN 2019 BY GITHUB AND MLH". It was the world's biggest day for hackers and IT innovators. The ACM and IEEE RAS student chapters organized this full day activity. More than 500 students were registered for different workshops that were held during the whole day.

Events

PCBF (Pak China Business Forum) 2019

Dedicated faculty members of the department of Computer Science and students actively participated in PCBF (Pak China business forum). It was held on 2nd September to 4th September 2019 in Expo center Lahore. Governor Punjab inaugurated the auspicious event and Minister of Science and Technology joined as chief guest of the event. Participant comprised various enterprises looking for extending their businesses to South-Asian market, renowned Chinese firms and Chinese companies already active in Pakistan seeking joint opportunities in Pakistan, businesses aimed to attract foreign investors, academia looking forward to sharing knowledge and industry linkages, academia seeking foreign grants and exchange of skills, Pakistani Business houses/SMEs, R&D organizations focused on product development and commercialization of R&D, Students and general public etc.



Computer Based Competition

The Department of Computer Science faculty members and students actively participated in computer based gaming, programming and web development competitions. Details of performed competitions/activities are mentioned. "CODERED by ACM chapter and IEEE RAS society" by Dr. Wajahat Qazi held on 19th October 2019 in Labs of Block C. Another event "CITE-19" held on 21st and 22nd October 2019 by Mr. Junaid Anjum in Block C labs, whereas "IDEOCON-1 by CEMS Society" event was held in 23rd October 2019 by Mr. Amaid Zia in Block A, C and D.

DICE-IET Preparation

A meeting regarding DICE-IET 2020 was held on 27th November 2019 in the Department of Computer Science. The panel had detailed discussion about planning, organization, marketing and major activities of event.



ACM and IEEE RAS

Microsoft activities

The ACM (Association for Computing Machinery) and IEEE RAS (Robotics and Automation Society) student chapter at COMSATS University Lahore Campus has been approved by Microsoft & MLH to host this prestigious event at campus. This event was comprised of Microsoft: Analyze Index Video, Microsoft: Build and deploy node.js, Microsoft: FAQ BOT using Azure and Gaming Competition held on 14th December 2019.

ACM and IEEE RAS

Python, Twilio and Unity

The students of CS Department organized a series of workshops on 12th Oct 2019 in CS labs on Python I, II, III, Twilio 101, 201, Unity(C#) and Gaming Competition.

Frontier of Information Technology (FIT FA19)

17th International Conference on Frontiers of Information Technology (FIT'19) was held from December 16-18, 2019 at Islamabad, the beautiful capital of Pakistan. It is the seventeenth consecutive year that COMSATS University, Islamabad (CUI) is organizing this prestigious event. Dr. Asad Hussain was the member Steering Committee and Dr. Usama Ijaz Bajwa was the member of program chair for the event from CS department Lahore Campus.

Punjab Safe City Project MoU

The Department of Computer Science CUI, Lahore campus has signed MOU with PSCA (Punjab Safe City Authorities) on 30th October 2019. Dr. Ghulam Rasool, Dr. Zulfiqar Habib and Ms. Saman were the key members from CUI Lahore for the signing event. In future it will be a great opportunity for our faculty members and students to work jointly with PSCA and for achieving this milestone University higher administration and specially Director Campus provided complete support of this process.



Artificial Intelligence : as an agent of Change

Awards

The Department of Computer Science senior faculty member Dr. Wajahat Mahmood Qazi was invited in Punjab Governor house for a talk on "Economics, Politics & Power: Artificial Intelligence as an Agent of Change". It was held on 20th November 2019.

Visio Spark 2019

The CUI Wah campus organized Visio Spark 2019 which was held on 23 November 2019. The students from different universities across Pakistan participated in this event. Students of Computer Science Department from CUI Lahore campus participated in this event and achieved following winning positions:

1. 1st Position in Web Development Competition supervised by Dr. Usama Bajwa.
2. 1st Position in Software Projects Competition supervised by Mr. Aamer Mahmood.



PITB—E-Rozgar Presentation in ISCSIC 2019 – Netherlands



Head of Computer Science Department, Dr. Ghulum Rasool, visited round table conference arranged by PITB for discussion on expansion of E-Rozgar program in 1st week of September. PITB conducted training on system developed for formulation and monitoring of foreign funded projects for capacity building. The session was attended by 30-35 project directors/focal persons of foreign funded projects of all administrative departments across Punjab on SMDP System. Opportunities were discussed later with DARC members are decisions were forwarded to campus authorities.

Department of computer science faculty member Dr. Farooq Ahmad was in Amsterdam, Netherlands for presentation in 3rd International Symposium on Computer Science and Intelligent Control (ISCSIC 2019) On the topic of “Petri Net based Business Process Modeling of Enterprise Systems” in September 2019.

Science and Technology Expo Cum Conference PCSIR Lab Complex

A Science and Technology Expo Cum Conference was held at PCSIR Laboratories Complex on 23rd and 24th September 2019. The Computer Science Department students made an inspirational representation in the event. All projects remained focus of media and the participants. A DAWN News reporter particularly expressed his interest in the project titled Stance Detection for the Fake News Challenge which is supervised by Dr Waqas Anwar to create a news package on it. For this purpose he exchanged contact information with the students. Dr. Waqas Anwar, Dr. Usama Ijaz Bajwa, Dr. Allah Bux Sargano and Mr. Usman Akram have persuaded their students to participate and ensured their participation in the event.



Faculty Participation

The Department of Computer Science faculty members and students actively participated in students week Fall 19 semester. Details of performed competitions/activities are mentioned:

Title	Focal Person	Date	Venue
CODE RED by ACM Chapter & IEEE RAS Society.	Dr. Wajahat M. Qazi.	19th October 2019.	Department of Computer Science, C-Block.
CITE-19.	Mr. Junaid Anjum.	21-22 October 2019.	Department of Computer Science, C-Block ground.
IDEOCON-1 by CEMS Society	Mr. Amaid Zia	23rd October 2019	A, C and D Blocks

PhD Award

Atif Saeed, Assistant Professor CS Department CUI Lahore campus successfully defended his PhD Defense at Lancaster University on 12th July 2019. He was supervised by Dr Peter Garraghan at Lancaster University and Prof. Asad Hussain at CUI Lahore campus.

CONGRATULATIONS Dr. ATIF SAEED !!!



• An official delegation of **NCEAC** committee consisting of Chairperson Department of Computer Science and two senior faculty members from CUI Islamabad campus visited Department of Computer Science Lahore campus. It was full day activity for checking and evaluation of pre accreditation process. The HoD CS gave them a presentation on department and accreditation requirements and then the Head of Department and senior faculty members along with delegation had a meeting with Dean FIST and campus Director on accreditation related issues. They followed a tentative plan and visited campus premises accordingly. Overall activity was very constructive and helpful in a professional manner.

Visits

• A delegation from **RAREIIO** (Australian company) visited Department of Computer Science. In a meeting with HoD CS, they showed keen interest for recruitment of top talented students and also requested for resumes of potential candidates (Internees, Research associates) for hiring in their company. The meeting was held on 14th October 2019 and was very successful.

• A delegation from **TECHXECT** (IT Company) visited Department of Computer Science and in official meeting with Head of department, they showed interest to organize workshops on Robotics and Artificial Intelligence. It was held on 14th October 2019

Faculty Hiring

• The Department of Computer Science conducted interviews for faculty hiring. The interviewing committee consisted of senior faculty members, senior representative from Human Resource department and Head of Department Computer Science. The panel successfully interviewed 22 numbers of candidates under supervision of Head of Department and it was held on 22nd November 2019.

MS Synopsis Presentation

The MS Synopsis Presentations of the following students were held on 10-11 October 2019 in Department of Computer Science. Details are following:

Sr. #	Name	Registration	Supervisor
1	Naveed Ahsan Ali Raza	FA17-RCS-018	Dr. Zulfiqar Habib
2	Ahtsham Shoukat	FA17-RCS-011	Dr. Hamid Turab Mirza
3	Ghulam Mehmood	SP17-RCS-017	Dr. Hamid Turab Mirza
4	Abid Ali	FA17-RCS-034	Dr. Hamid Turab Mirza
5	Mariyam Imtiaz	SP18-RCS-002	Dr. Rao Muhammad Adeel Nawab
6	Hira Arshad	SP18-RCS-024	Dr. Rao Muhammad Adeel Nawab
7	Hammad-ud-din Ahmed	SP17-RCS-018	Dr. Usama Ijaz Bajwa
8	Adnan Moghal	FA15-RCS-014	Dr. Ghulam Rasool
9	Khalil Ul Rehman	SP18-RCS-006	Dr. Salman Khan
10	Ahmed Raza	SP18-RCS-005	Dr. Waqas Anwar
11	Mubashir Ubaid Ullah	SP18-RCS-013	Dr. Waqas Anwar

CITE 19 Event Report

Several important festivals and events were organized by students during the Student Week Fall 2019. COMSATS Information Technology (CITS) organized multiple activities in the event entitled “CITE 2019” on October 21, 22, 23 2019. The events included:

1. Gaming Competition



2. Photography competition

3. Treasure Hunt



4. Futsal



Funding

NGIRI, IGNITE 2019

The Department of Computer Science faculty member Mr. Imran Raza's undergraduate FYP projects has been recommended for funding by NGIRI, IGNITE. The details are following:

- Kitab ki Dunya.
- Intelligent Brain Computer Interfacing BCI based personalised Healthcare system for neuro rehabilitation.

Mr. Muhammad Shahid Bhatti, Undergraduate FYP project has been recommended for funding by NGIRI, IGNITE. The details are following:

- Speaker Identification Using Deep Learning

Ms. Humera Faisal, Undergraduate FYP project has been recommended for funding by NGIRI, IGNITE. The details are following:

- Module Based Organized Document Classification System

Research Publications:

The following research papers by faculty members of CS department were accepted.

- Akemi Galvez-Tomida, Andres Iglesias Prieto, Hassan Ugail, Lihua You, Habibollah Haron and Zulfiqar Habib, “Firefly Algorithm Approach For Rational Bezier Border Reconstruction of Skin Lesions from Macroscopic Medical Images”, 13th International Conference on Software, Knowledge, Information Management and Applications, Island of UKULHAS, Maldives, IEEE Computer Society Press, USA, August 26-28, 2019, <http://skimanetwork.info/>, presented.
- Ehtaz Chaudhry, Jian Chang, Hassan Ugail, Alexander Malyshev, Alfonso Carriazo, Andres Iglesias, Zulfiqar Habib, Allah Bux Sargano, Habibollah Haron, Algirdas Noreika, Lihua You and Jian Jun Zhang, “Modelling and Simulation of Lily flowers using PDE Surfaces”, 13th International Conference on Software, Knowledge, Information Management and Applications, Island of UKULHAS, Maldives, IEEE Computer Society Press, USA, August 26-28, 2019, <http://skimanetwork.info/>, presented.
- Muhammad Awais Shoukat, Allah Bux Sargano, Zulfiqar Habib, Lihua You, “An automatic cluster-based approach for depth estimation of single 2D images”, 13th International Conference on Software, Knowledge, Information Management and Applications (SKIMA), Island of UKULHAS, Maldives, IEEE Computer Society Press, USA, August 26-28, 2019, <http://skimanetwork.info/>, presented.
- M. Ashraf, R. Nawab and F. Nie (2019), "A Study of Deep Learning Methods for Same-genre and Cross-genre Author Profiling", Journal of Intelligent & Fuzzy System (accepted) , Impact Factor: 1.637
- M. Ashraf, R. Nawab and F. Nie (2019), "Author Profiling using Bi-lingual Tweets", Journal of Intelligent and Fuzzy Systems (JIFS) (accepted), Impact Factor: 1.637
- Ghulam Rasool, Hassan Akhtar , Towards a catalog on Variants of Design Patterns”, has been accepted for presentation in the 17th International Conference on Frontiers of Information Technology (FIT 2019) to be held in Islamabad, Pakistan from December 16-18, 2019.
- Mr. Imran Raza’s paper titled "Erlang Based Server Selection Scheme Using Software Defined Networking in Datacenters for Energy Conservation" has been accepted for presentation in the 17th International Conference on Frontiers of Information Technology (FIT 2019) to be held in Islamabad, Pakistan from December 16-18, 2019.
- Syam Noor, Muhammad Hasham, Allah Bux Sargano, Zulfiqar Habib (2019) "Real-time Rehabilitation and Fitness System using Depth Sensor", The Proceedings of 17th International Conference on Frontiers of Information Technology (FIT 2019), IEEE Computer Society Press, USA, accepted.
- Chang-Cheng Wei, Muhammad Salman, Usman Ali, Masood Ur Rehman, Muhammad Aqeel Ahmad Khan, Muhammad Hasanain Chaudary and Farooq Ahmad paper titled "Some topological invariants of graphs associated to the group of symmetries" has been accepted in Journal of Chemistry, I.F. = 1.701.
- Muhammad Aksam Iftikhar paper titled “Segmentation and Grade Prediction of Colon Cancer Digital Pathology Images” Across Multiple Institutions has been accepted in journal of “Cancers”, IF= 6.162.
- Rab Nawaz Jadoon, WuYang Zhou, Iftikhar Ahmed Khan, Muhammad Amir Khan, Shahbaz Akhtar Abid, and Nauman Ali Khan article titled “Performance Evaluation of Zone-Based Routing with Hierarchical Routing in Wireless Sensor Networks” Published in Journal: Wireless Communications and Mobile Computing with Impact Factor: 1.39.

Newsletter Team



Dr. Atifa Athar
Assistant Professor



Ms. Humaira Faisal
Assistant Professor



Ms. Sana Rizwan
Assistant Professor



Muhammad Farhan
Lecturer



Ms. Momina Shaheen
Lecturer



Anas Saleem
Student