



Computer Science Department
COMSATS Institute of Information Technology
Lahore Campus



Newsletter

Issue Fall 2K17

Message from the Dean

I welcome you all on the behalf of Computer Science Department. Comparatively to other disciplines our students are getting more skillful in this modern technology. In future we see our students as excellent programmers, researchers and analysts. We are well aware of everyday breakthroughs in modern technology and thus are committed to equip you 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 knowledge practically.



Dr. Asad Hussain

Message from the Chairman

"Collapsing any nation does not require use of atomic bombs or the use of long range missiles. It only requires lowering the quality of education and allowing cheating in the examinations by the students. So the collapse of education is the collapse of the nation".



Dr. Zulfiqar Habib

Message from the HOD

I welcome you all in Computer Science Department. Our CS department is one of the major backbones of COMSATS; currently we are offering two undergraduate programs - BSCS, BSSE and two graduate programs MSCS and PhD. Let me assure you that you have selected best discipline; we are assuring quality education throughout the country; moreover, our graduates are blooming as an industrial entrepreneurs and outstanding academicians. Now our graduates are working in different software houses too as successful project managers, system analysts, and software engineers and so on. Overall, the IT future is getting bright and demanding day by day. Good Luck and Best Wishes in future.



Dr. Ghulam Rasool

Meeting with HOD

On 8th of September 2017, a meeting with HOD of CS department Dr. Ghulam Rasool was arranged where he appreciated the good performance of the management and faculty members. He discussed different aspects as well as issues regarding management, faculty and students. He also encouraged the faculty to practice peer reviews to improve classroom management and their teaching skills. Further he suggested that faculty should communicate the moral and ethical norms to the students on regular basis. The meeting ended with the vote of thanks.

IEEE Mini Pocco

IEEE Lahore Section has organized one day event with a name of "IEEE Mini POCO", on 19th of September, 2017 at Flattie's Hotel, Lahore. COMSATS and H.E.C collaboratively sponsored this event. More than 70 members participated in this event from all over the Pakistan from which 37 were IEEE members themselves. In this event different members have shared their reviews regarding the conduction of conferences, how to prepare good papers etc. Moreover

Dr. Usama Ijaz discussed foundation of Event Management. His talk highlighted all the aspects from planning to the post conference reporting. Event gone successful.



Research Activities

VIG Group

International Funding Through European Union's H2020-MSCA-RISE-2018

European Union's Horizon 2020 MSCA-RISE has started funding with the kick off meeting on Dec. 18, 2017 for the PDE-GIR project (Jan 2018-Dec 2021) under grant agreement No. 778035. Computer Science Department of CIIT Lahore campus is representing from Pakistan through work package leader Dr. Zulfiqar Habib. CIIT is among the consortium of eight partners including an industry and International Universities from UK, Spain, Norway, Lithuania, Pakistan and Malaysia. Said project is in the area of Geometry modelling.

IM ROBOTICS

In FALL 2017 Dr. Wajahat got an opportunity to take training from Singapore which was sponsored by services syndicate at universal robot.



Chulo Asman

- ❖ On 2nd October, 2017 FM89 has invited Dr. Wajahat Assistant professor of CS in their program of Chulo Asman for an interview regarding "Artificial Intelligence & Nations Future".
- ❖ On November 14, 2017 2nd interview was conducted in same program on the topic of "Quantum Computing and Artificial Intelligence".

FIT 2K17

On December 18, 2017, FIT was organized at Islamabad by COMSATS. Professor Dr. Feng Xia from University of China, was the keynote speaker and Prof. Dr. Tayyeb Akram, highlighted the objectives of the conference. The theme of the conference for this year was "Connecting with Industry". Moreover Dr. Usama Ijaz , Program Chair stated that the acceptance ratio of technical papers in FIT was 22% that is comparable to other international conferences.



DICE 2017: National Innovation Basket Event

DICE-Information and Enabling Technologies (IET) Innovation event has been organized on December 15, 2017 at COMSATS Lahore. There were different groups who discussed the new project ideas in the field of artificial Intelligence and cloud computing. Following faculty members participated in the event: Dr. Wajahat M. Qazi, Dr. Atifa Athar, Dr. Tayyab, Dr. Adnan and Dr. Shahbaz. The event was a success.



Meeting with the DEAN

The dean FIIST Dr. Asad Hussain has conducted a meeting with computer science faculty on February 2, 2018 at 3:00 pm in seminar room A-block. The Respected Dean of COMSATS Lahore, chaired the meeting in his capacity, in which he discussed different aspects as well as different issues regarding research productivity and publications.



Moreover he discussed improvements in LABs and the softwares and informed us that more improvements are going to be made in future semester. Respected Dean Also discussed the eligibility criteria and ensures the process as per TTS rules. He said that the cases fulfilling the criteria will be endorsed by the HEC,

Dr. Asad Hussain discussed the importance of computer science department that the Computer science at CIIT Lahore campus offers unique opportunities for innovative education and research. Our main goal is to impart quality education by introducing Objective Based Learning through our continuously-accredited CS degree programs.



FYP final presentations Fall 2017: Ceremony inauguration by the Dean Dr.Syed Asad Hussain.

Dr. Wajahat Mehmood Qazi

He is as Assistant professor in the department of Computer Science at COMSATS Institute of Information Technology. He is TED Ed educator and right now among the only 10 TED Educators in the Punjab. He worked as the Deputy Director/Assistant professor Department of Computer Science, GC University Lahore, Senior Scientific Officer Institute of molecular Science and bioinformatics, Senior Lecturer Preston University, System Architect Intelli-Technologies, Assistant Project Manager National Engineers. His area of Interest includes Quantum computing and cognition, Cybernetics, Artificial General Intelligence, Machine Consciousness, Bioinformatics. He is the author of the book "Machine Learning in Bioinformatics: An Approach for Protein Sequence Analysis" and several journal papers.



Invited Talks

Dr. Wajahat Mahmood Qazi

- October 13th, 2017: Dr. Wajahat Qazi was invited to talk on Machine Consciousness Approach to Agro-robotics, in 2nd International Workshop on Robotics and E-Agriculture, held at Ali Institute of Education, Lahore, Pakistan.
- October 14th, 2017: Dr. Wajahat Qazi was invited to talk on How to Develop an Artificial Mind for Robot at 11th IEEE Pakistan Student / Young Professionals / Women in Engineering Congress 2017 at Superior University, Lahore, Pakistan.



- December 16th,2017: Dr. Wajahat Qazi was invited to talk on the Development of Computational Brain/Mind at an event of DICE-Information & Enabling Technologies (IET) Innovation at COMSATS, Lahore.
- December 18th,2017: Dr. Wajahat Qazi was invited to talk on Implementation of Nature inspired Conscious Agent in Frontiers of IT at Serena Hotel, Islamabad, Pakistan.
- December 27th,2017: Dr. Wajahat Qazi was invited to talk on Artificial Intelligence and its Applications: Scientific, Technological and Religious Aspects in Jamia Ashrafia, Lahore, Pakistan.
- January 3rd,2018: Dr. Wajahat Qazi was invited to talk on how to Develop Artificial Mind for Robot in the workshop of Robotics and Industrial Automation at the university of South Asia, Lahore, Pakistan.



- Dr. Atifa Athar**
- January 4th, 2018: Dr. Atifa Athar was invited to talk on Modeling Socio-Emotive Intelligent Robots: A cutting edge to achieve the perspective of Coexistence in 2nd IEEE National Workshop on Robotics and Industrial Automation at University of South Asia, Lahore, Pakistan.



- Dr. Abid Sohail Bhutta**
- January 3rd,2018: Dr. Abid Sohail Bhutta was invited to talk on Robotics Process Automation and improvement in 2nd IEEE National Workshop on Robotics and Industrial Automation at University of South Asia, Lahore, Pakistan.



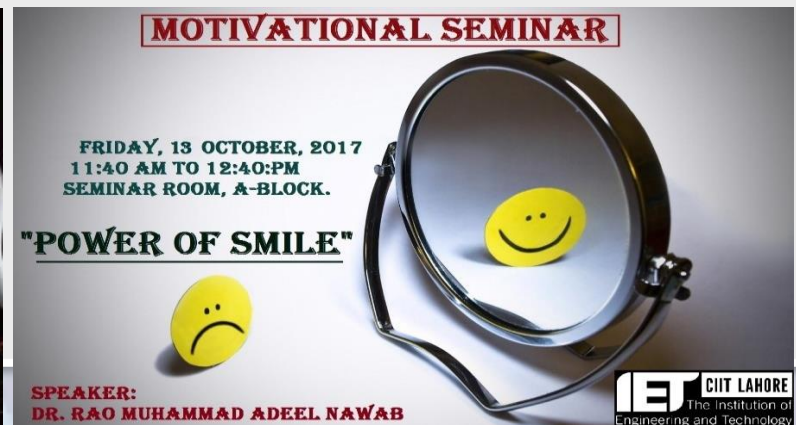
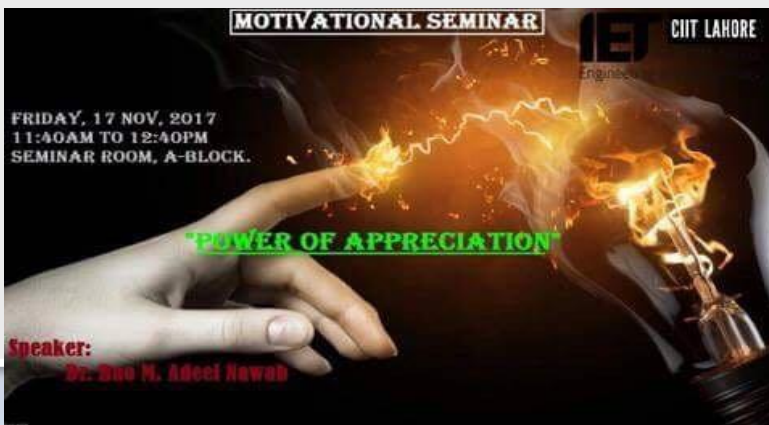
Panel Discussions

October 14th,2017: Dr. Wajahat Qazi has participated in panel discussion on Future of Robotics and Industry 4.0 Superior University, Lahore, Pakistan.

December 16th,2017: Dr. Wajahat Qazi was a panelist on future of AI and Job Security at COMSATS , Lahore, Pakistan.

Motivational Seminar

- ❖ On October 13, 2017 a motivational seminar has been conducted "Power of smile" by Dr. Rao Adeel. The main goal of this seminar was to give them ability to face overburdened issues positively.
- ❖ On November 17, 2017 another motivational seminar has been conducted on "Power of Appreciation" by Dr. Rao Adeel. The main goal of this seminar was to develop strong connection with Allah, to solve issues faced by students and to improve their quality of life



Social Service Activity

The CS Faculty member Dr. Abid Sohail Bhutta and his students of BSE did a social service activity. First the team searched the orphanages and decided to donate the orphanage "Dar-ul-Shafqat" located near Chowk Yateem Khana, Lahore. This orphanage caters 120 orphans ranging the age 5 to 20. Dr. Abid Sohail Bhutta and his team of BSE students decided to make Eid festival special for orphans by donating new clothes. So, the team invited everyone to donate. The students bought clothes and gifts for them from collected money.



Completion of 1st Doctoral Degree in Computer Science at Lahore Campus

Dr. Allah Buksh has completed his PhD in Computer Science under the Faculty Development Program of CIIT Lahore Campus and Lancaster University, UK. The research was jointly supervised by Dr. Plamen Angelov, Professor at Lancaster University and Dr. Zulfiqar Habib, Professor at CIIT, Lahore Campus and successfully completed in three years, the minimum possible duration. Title of the thesis is "Vision-based Human Action Recognition using Machine Learning Techniques"



PHD student achievement

First PhD student Ms. Irum Noreen of CS Department has successfully appeared in the final Oral Defense of her PhD Thesis entitled "Motion planning of car-like mobile robots in cluttered environments" on 22-01-2018. All examiners have declared her PASS with excellent remarks. She is supervised by Dr. Zulfiqar Habib and completed her thesis in the record time of 3.5 years.



Invited Talk

Jan 4th, 2018: Syed Tanweer Shah Bukhari was invited to talk on Imaginations in Robots: Progress, Challenges and Opportunities in 2nd IEEE National Workshop on Robotics and Industrial Automation at University of South Asia, Lahore, Pakistan.



Short Visits of Japan for Graduate Students

Japan Science and Technology (JST) agency has approved short visits of Japan for two students of VIG-Robotics, the research Centre of Computer Science Department, CIIT Lahore campus. The case was submitted through In-Charge VIG_Robotics, Dr. Zulfiqar Habib for MS students Mr. M. Awais Shoukat and Mr. Aqib Mumtaz.

Monthly Get-Together

Monthly get together of PHD faculty in faculty block. This event helps to do some healthy formal and informal talks.



Corn Party

On October 5, 2017 Monday, Mr. Chaudhary Nadeem faculty member of CS department has arranged corn party at C-12 at 12:30 P.M. Limited Faculty members have joined the corn party due to their classes. However, environment was very fresh and good bonding was made between faculty members.



Kino Party

On January 17, 2018 Wednesday, Mr. Chaudhary Nadeem has arranged a Kino party at juice corner. This activity was quite refreshing for all the faculty members in the CS Department. It helps them to tie up with each other in a relaxed manner.



Student Week

Hockey Match

CIIT Vs LUMS Hockey match was organized and CS Students also participated in this event.



Auto Show

Ms. Tooba Ahmed, along with her team organized the third "Auto Show" in CIIT LHR on Saturday 4th of November, 2017.



Paintball

IM Robotics Group participated in Paint Ball Competition, being held in Student Week, Spring 2017 at COMSATS Institute of Information Technology, Lahore.



MEHFIL-E-MUSHAIRA

COMSATS Literary Society organized this event to nourish the literary taste among students as they tried to promote our culture through "Mehfil-e-Mushaira". Mr. Anwar Masood along with many honorable poets have graced the occasion.



Sadaa-e-Sufi

COMSATS Islamic Cultural Society organized a seminar by Syed Bilal Qutab followed by a Sufi Kalaam Qawwali, On Saturday, 4th November, 2017 at COMSATS LHR campus.



MOUSIKE RAVE 17

Pak Media Industry presented "Mousike Rave '17" on November 3, 2017 at N-Block, CIIT Lahore.



OBE & ABET Workshop

HEC, PEC and many educational institutions of Pakistan are now moving towards OBE because of its relative advantages over the traditional education system. OBE emphasizes the achievement of student outcomes and thus improves the quality of education and will bring it at par with international standards. Outcome-based educational method has been adopted in education systems around the world, from primary to higher education levels. Accreditation bodies like 'Accreditation Board for Engineering and Technology (ABET)' and Washington Accord both accept OBE as the only teaching methodology. As most Pakistani engineering programs are aiming to get the OBE accreditation. So the COMSATS CS department arranged a training session for faculty.

On 31st January, 2017 OBE and ABET accreditation workshop was organized at Kinara restaurant Gujrat. CS faculty members participated in this workshop. Our respected HOD and chairman inaugurated the workshop. In this workshop experts trained presented overview and technical details of OBE work practical. Refreshment and lunch was arranged, at the end our chairman closed loop with open discussion and workshop went successful. Thanks to Director CIIT Lahore for funding the workshop.



Research Productivity: (Journal Publications)

- ❖ Jawaria Munir, Zeeshan Iqbal, Wajahat M. Qazi, Daniel C. Hoessli, Zahid Mahmood and Nasir Uddin (2017), Alterations in Structural and Biological Activities of Merozoite Surface Protein 2 due to O-GlcNAc Modification: In Silico Approach, *Current Bioinformatics*, 12, Impact Factor: 0.77.
- ❖ Atifa Athar, Khalil Ahmed, Sagheer Abbas, Yousaf Saeed, (2017), Modeling Cooperative and Competitive Emotions Using Parallel SOM for Artificially Intelligent Agents: In *IJCSNS International Journal of Computer Science and Network Security*, Vol: 17, Issue: 2, Standard: 1738-7906, Impact Factor: 1.44.
- ❖ Adnan Idris, Aksam Iftikhar, Zia ur Rehman (2017), Intelligent churn prediction for telecom using GP-AdaBoost learning and PSO undersampling: In *Cluster Computing*, Springer, pp: 1-15, Impact Factor: 2.040.
- ❖ Shahbaz Ahmad, Muhammad Asif, Ramzan Talib, Muhammad Adeel, Muhammad Yasir, Muhammad Hasanain Chaudary (2017), Surveillance of intensity level and geographical spreading of dengue outbreak among males and females in Punjab, Pakistan: A case study of 2011: In *Journal of Infection and Public Health*, pp: 1-14, Vol: 10, Issue: 6, Impact Factor: 1.439.
- ❖ Shahbaz Ahmad, Muhammad Asif, Muhammad Majid, Muhammad Waleed Ashraf , Muhammad Hasanain Chaudary, Manazza Iqbal (2017), An Effective Study of Geographical Pattern and Intensity of Dengue Epidemic among Females in Punjab, Pakistan: In *Journal of Engineering Technology*, pp: 45-57, Vol: 6, Impact Factor: 0.90.
- ❖ Ahmad, A, Whitworth, B., Zeshan, F., Bertino, E., and Friedman, R.(2017), Extending social networks with delegation: In *Elsevier Computers & Security*, pp: 546-564, Vol: 70, Impact Factor: 2.849.
- ❖ Zeshan, F., Ahmad, A., Mehmood, A., Ulhaq, I., Mohamad, R., Hussain, S. A., Raza, I., Ahmad, N., Abdulgader, N., and Babar, M. (2017), An Ontology-Based Service Discovery Framework for Dynamic Environments: In *IET Software*, pp: 64-74, Vol: 11 Issue: 2, Impact Factor: 1.07.
- ❖ M. Hasan Jamal, Arun Prakash, Milind Kulkarni (2017), Exploiting Semantics of Temporal Multi-Scale Methods to Optimize Multi-Level Mesh Partitioning: In *International Journal for Numerical Methods in Engineering (IJNME)*, pp: 58-85, Vol: 112, Issue: 1, Impact Factor: 2.1.
- ❖ SA Hussain, M Fatima, A Saeed, I Raza, RK Shahzad (2017), Multilevel classification of security concerns in cloud computing: In *Applied Computing and Informatics*, Elsevier, pp: 57-65, Vol: 13, Issue: 1, ISI.
- ❖ Muhammad Adnan, Abaid-ur-Rehman, M. Ahsan Latif, Maria Nazir (2017), Estimating Evapotranspiration using Machine Learning techniques: In *International Journal of Advanced Computer Science and Applications*, pp 108-113, Vol: 8, Issue: 9, ISI.

- ❖ Nadeem Khan Jadoon, Waqas Anwar, Usama Ijaz Bajwa, Farooq Ahmad (2017), Statistical machine translation of Indian languages: a survey: In Neural Computing and Applications, pp 1-13, Impact Factor: 2.61.
- ❖ Ubaid Ur Rahman, Allah Bux Sargano, Usama Ijaz Bajwa (2017), Android-based Verification System for Banknotes: In Journal of Imaging, pp 1-14, Vol: 3, Impact Factor: 2.69.
- ❖ Iqra Obaid, Syed Asad Raza Kazmi, Awais Qasim (2017), Modeling and Verification of Payment System in E-Banking: In International Journal of Advanced Computer Science and Applications(IJACSA), pp: 195-201, Vol: 8, Issue: 8, Impact Factor: 0.63.
- ❖ S. Sameen, M. Sharjeel, R. Nawab, P. Rayson and I. Muneer (2017), Measuring Short Text Reuse For The Urdu Language: In IEEE ACCESS, pp: 1-1, Vol: PP, Issue: 99, Impact Factor: 3.244.
- ❖ Khurshid Asghar, Ghulam Gilanie, Mubbashar Saddique, Zulfiqar Habib (2017), Automatic Enhancement of Digital Images using Cubic Bézier Curve and Fourier Transformation: In Malaysian Journal of Computer Science, pp: 300-310, Vol: 30, Issue: 4, Impact Factor: 0.6.
- ❖ Classification of Normal and Abnormal Brain MRI Sli Ghulam Gilanie, Usama Ijaz Bajwa, Mustansar Mahmood Waraich, Zulfiqar Habib, Hafeez Ullah, Muhammad Nasir (2017), Classification of Normal and Abnormal Brain MRI Slices using Gabor Texture and Support Vector Machines: In Signal, Image and Video Processing, pp: 1-9, Impact Factor: 2.

Conference Papers:

- ❖ **Machine Imagination:**A Step Towards the Construction of Artistic World Through Storytelling, Syed Tanweer Shah Bukhari, Asma Kanwal, Wajahat Mahmood Qazi, 2ndEAI International Conference on Future Intelligent Vehicular Technologies, Oct 17-19, 2017, Islamabad.
- ❖ A Tool for Knowledge-oriented Physics-based Motion Planning and Simulation , Muhayyuddin, Aliakbar Akbari, Jan Rosell, Jan, Wajahat Mahmood Qazi, 2ndEAI International Conference on Future Intelligent Vehicular Technologies, Oct 17-19, 2017, Islamabad.

Achievement of Undergraduate Students

Dr. Usama's FYP Students research paper "Multi-Spectral Face Recognition System" was accepted in Computational Vision and Biomechanics series published by Springer and recommended to present in Vip IMAGE conference 2017. Students who participated in this paper were: Muhammad Umair (DDP-FA13-BCS-105) ,Syed Ali Murtaza Sherazi (DDP-FA13-BCS-142), Haseeb Ahmed (DDP-FA13-BCS-051)



Student Scholarships

Sr. No	Name of Scholarship	Type of Scholarship	Who can Apply	Eligibility Criteria
1	Merit Scholarship	Merit based/ up to 100% tuition fee waiver	New applicants/ students of FA16 for BS programs only	Notification attached Also seen on website
2	HEC-PAK-USAID Need Based	Need Based Scholarship/ Fully funded	For open merit all Computing/Engineering BS/MS programs	Based on Need Assessment
3	NTS Need Based	Need Based Scholarships/ Partially funded	All open merit For BS/MS programs	Based on Merit cum Need Assessment
4	Punjab Educational Endowment Fund Scholarship (PEEF)	Need Based Scholarship/ Partially funded	1st semester students only For BS and MS programs	i). HSSC/BS in 2016 with 60% Marks or 2.5 CGPA ii) Domicile Punjab iii) Salary Limit P.M 30,000/-
5	CIIT-Qarz-e-Hasna (Interest Free Loan)	Interest Free Loan/ Partially Funded	All open merit students For BS and MS	Based on Need Assessment
6	Ihsan Trust- Qarz-e-Hasna (Interest Free Loan)	Interest Free Loan/Partially Funded	All open students For BS and MS programs	Based on Need Assessment
7	Worker children 30% Quota-Free Education	Fully Funded	Children of workers	Based upon criteria set out by PWWB
8	HEC-PM Reimbursement Scheme	Partially funded	New Intake PhD students from selected Areas	Enrolled in PhD/belongs to selected district. District list can be seen at HEC Link/at SFAO office
9	Federal/Provincial Benevolent Fund Scholarships	Partially Funded	Students/Children of permanent Govt. Employees Federal/Provincial	As per Govt. Rules/ For Details visit SFAO office
10	Kinship Concession	Partially Funded	All open merit students	Two or more students concurrently studying at CIIT

Admissions

Admissions for the programs of bachelors in "Computer Science", "Software Engineering" and "Master in Computer Science" for Spring 2018 are being Completed.

Bachelor of Science in Computer Science

This program at CIIT focuses on instilling comprehensive computer science knowledge among students. The purpose of this program is to produce graduates with a sound knowledge of computer science, contemporary technologies, and professional skills.

Bachelor of Science in Software Engineering

This program is preparing professionals having a mastery of software development principles, theory, practice, and process to develop high quality software applications. It is producing future agents of change, individuals who will be leading and improving the software industry and practices in the coming years.

Master of Computer Science

This program at CIIT has been designed for those students who wish to improve their knowledge of recent developments in Information Technology and to deepen their understanding in computer science.

Team behind this Newsletter



Dr. Atifa Athar



Ms. Maria Abedi



Mr. Zaheer A. Gondal



Ms. Anam Ahsan



Zimmar Ahmed