Department of Computer Science and Software Engineering, JUW has the aim to equip female students with the technologies that shape the world. The institution has made the utmost effort to turn this aim into reality. And now there are hundreds of students across Pakistan and beyond, leading others in their own sphere, who identify this place as their prestigious alma mater.

What's Inside

ACM JUW CHAPTER

ACM JUW chapter stands out for being one of few women centered institutions in Pakistan devoted for representation of female researchers and students. Department of Computer Science and Software Engineering JUW augments ACMs vision of bringing positive impact through Diversity, Equity, and Inclusion. ACMs JUW chapter choreographs events, webinars and workshops to serve its purpose. For inaugural session, Jahan Ara virtually joined as honorable guest for ACM seminar at Jinnah University for Women.

ACM

PAKISTAN DAY-2022

Jinnah University for Women organized a ceremony at campus on 22nd March 2022 in commemoration of Pakistan Day. Large number of students and faculty members foregathered for celebrations and renewed their commitment and allegiance with the country. Cultural Day was orchestrated the same day where students participated in colors of all provinces, ethnicities and customs. ___ joined the event as Chief Guest and shed lights on_____. Students, Faculty members and our honorable guest celebrate the day with zeal to honor the moment when the Pakistan Resolution was adopted in 1940

FYP-2018

The department of Computer Science & Software Engineering strives to provide opportunities to students for presenting the skills they have learnt during their academic activities. Keeping this spirit, the department organizes an exhibition annually where students present their Final Year Projects (FYP). These exhibitions provide a platform to graduating students where they can present their work to peers, teachers and industry experts. This also enables them to get direct feedback from viewers and evaluators. This summer, the FYP exhibition was organized on ___ in Exhibition Hall of university. Virtual Reality, Augmented Reality and Block chain dominated Final Year Projects of batch 2018 with _ Based on VR, __ on AR and __ constructed around __. Other areas focused were __. DeFear, ___ were most applauded projects from batch of 2018.

From batch 2018, Wajeeha Rehman, Ume Aiman Javed and Ayesha Shafi were able to secure top three positions in the class of BS Computer Science while in BS Software Engineering, Khadeeja Moin, Rabiya Salehjee and Ayesha Khan earned the title of position holders.

POSITION HOLDERS 2018

A TOUR TO JTECH 2022

JTECH is a technology extravaganza, annually organized by Department of Computer Science and Software Engineering, Jinnah University for Women. Job fair, ideas Presentations and Final Year project display have remained focus of the event in the past few years. Aim behind this effort is to encourage our talented and competent students to showcase their ideas and work that are outcome of their acquired knowledge and technical skills they learn here.

To scale up their capabilities and strength of facing professional challenges, we invite renowned professionals and experts from industry for evaluation of projects every year. The event is product of combined efforts of faculty and students of the department. This year, we were honored to have Mr. Usman Dar, Special Advisor for Youth Affairs to then Prime Minister as our chief guest.

JTech'22 started with Recitation of Holy Quran followed by introductory session. Students' groups were assigned cubicles where, by making use of info graphics and illustrations, they elaborated their ideas and work. Before closing ceremony, Honorable Chancellor Mr. Wajeeh Uddin Ahmed addressed the audience, especially students. His encouraging words and appreciation raised the morale and confidence in students. He encouraged the creativity and innovation students managed to put in their work. Moreover, he stressed upon the need to channelize these innovative products all the way to their respective market.

Chief organizing committee for the event included Ms. Kanwal Zahoor, Ms. Soomaiya Hamid and Ms. Hafiza Anisa Ahmed who played vital role in choreographing the whole event. Department Administration appreciated their collaboration and diligence for engineering such events.

IBRAS

INTERNATIONAL CONFERENCE ON BIOLOGICAL RESEARCH AND APPLIED SCIENCE

Faculty of Science, Jinnah University for Women in collaboration with individuals belonging from reputable Scientific Societies and institutions, was able to organize second edition of International Conference for Biological Research and Applied Sciences (IBRAS). Aim behind organizing this conference is to extend collaboration on research grounds within Pakistan and beyond, and provide opportunity for the global participants to share their ideas and experiences.

This year, 2nd international conference on biological research and applied science 2022 from 11th to 13th January 2022. The conference featured guest speaker sessions, research presentations and poster presentations on wide-ranging topics by individuals from academia and industry, focusing on various important areas of biological research & applied sciences. We believe this endeavor will bring together young aspiring researchers with accomplished scientists.

We were honored to have Prof Dr. A.Q. Mughal, Research Professor at Greenwich University, Karachi, as the Chief Guest. He has been awarded azaz-e-fazeelat and Sitara-i-Imtiaz in recognition of his services. Dr. Mughal possesses rich experience of more than 45 years in the administration and teaching in national and international institutions of higher learning.

The conference hosted 10 tracks with leading academic and corporate researchers including 10 key note lecturers, 100 oral talks and 10+ posters Presentations from all over the world. IBRAS 22 was 3 day event having multiple sessions taking place in parallel. There were 2 sessions on first day including Contemporary Research and Innovations in Biochemistry, Recent advances in Biotechnology; 6 sessions on second day for the tracks Innovations in Chemistry, Emerging Trends in Computing, Innovations Transforming Pharmacy and its Impact on Public Health, Zoology: Enlightening the Future, Challenges of Microbiology in 21st Century and Recent Advances in Food Science and Technology; and 3 sessions on final day regarding Herbal Medicine & Recent Advances, Sustainable use of Bio-resources in green Economy along with previously started zoology session.

All the sessions were well attended and appreciated by the participants. Shields of appreciation were distributed in the closing ceremony conducted with the vote of thanks by the conference chair and Dean Faculty of Science Professor Dr. Narmeen Zakariya Bawany.
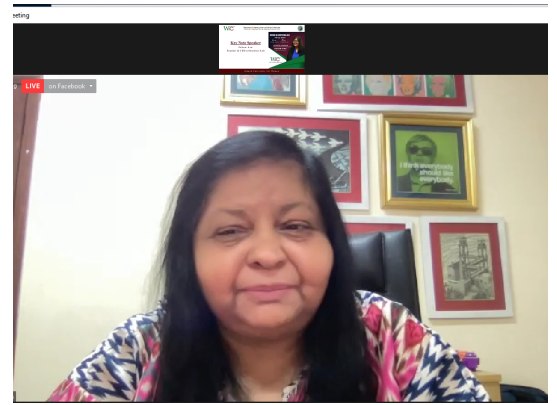
WOMEN IN COMPUTING

Department of Computer Science and Software Engineering has been promoting and furthering its commitment to advocate and advance Women Education in the country. Women in Computing is link of this chain which is organized every year to encourage and celebrate contributions superwomen of our society who have surpassed every limitation to build up their career in the field of technology.

WIC 22 was focused on measures needed for sustainable, clean-teach and innovative tech businesses, Cybersecurity in Pakistan, Impacts of climate Change, Economic Inclusion, supporting impact innovation system and Computing Industry education. Speakers from Pakistan and outside participated and shared their experience and journey with audience. Jehan Ara of Katalyst Lab was Chief Guest for the event. She commended efforts of the Department and faculty members, and uplifted young audience with her inspiring oration.

WIC this year was held at Jinnah University for women. The goal was to build a network of students of university with females to increase their reach and vision, and to foster growth. The objective of Women in Computing is to discover solutions that can solve the obstacles that hinder growth for women in the field of technology, as information technology is the field with highest density of female entrepreneurs and workers in Pakistan. Also, to discuss how women can serve as a catalyst in making women empowerment more efficient in Pakistan. Ms. Zainab Hameed, Ms. Sehrrish, Ms. Hira Wajahat, Ms. Sana Shah and Ms. Aqsa Tariq spoke in the event and inspired the audience to play their due role as responsible member of the society.

INDUSTRY VISIT

Department of Computer Science & Software Engineering Jinnah University for Women, recently arranged an industrial visit to Datacenter, Sharp Telecom (Private) Limited – SharpTel. Students along with faculty members visited the datacenter to experience the real environment of a datacenter. Mr. Farrukh Feroze Ali, Head of Technical at SharpTel demonstrated regarding day-to-day cloud and datacenter operations and services. SharpTel is a Tier III certified datacenter that has a vision of indulging its customers with a diversified portfolio of Software Services, Connectivity, datacenter and Colocation, Information Security, IT Security, automation services through state-of-the-art technology solutions. Mr. Waseem threw an ample knowledge of their datacenter racks, blade servers, storage servers' capacity, along with their power supply room. Such visits are impactful to the students as they enhance their practical knowledge regarding different protocols, techniques, tools, skills, and boost their enthusiasm for solving real-world problems.

CyberSecurity
THREATS AND TIPS FOR STUDENTS
&
CAREER PATHS
October 2021

Zainab Hameed
President WiCyS Pakistan Affiliate
Board Member ISACA Karachi Chapter
CEO, TeeSquare

SEMINARS & WORKSHOPS

Workshops, seminars, and webinars play a key role in students' life while acquiring professional education. Department organizes such activities to let the students explore their areas of interest. They also help them in interacting with professionals and trade ideas, thoughts, and views about different topics. The year gave us the freedom to get more and more involved in these types of activities. More than 25 seminars and workshops were arranged for students.

MAR 26, 2022
UPWORK MASTERCLASS
by Faiza Yousuf

MAR 17, 2022
CYBERSECURITY TECHNIQUES
by Farrukh Feroze Ali

MAR 16, 2022
IT RISK MANAGEMENT
by Zainab Hameed

MAR 15, 2022
AGILE BEST PRACTICES
by Shahzad Paracha

MAR 14, 2022
INTRODUCTION TO SOFTWARE QUALITY ASSURANCE AND MARKET OPPORTUNITIES
by Laraib Fakhar

MAR 05, 2022
INFORMATION SECURITY CAREER AND CHALLENGES
by Uzair Hashmi

DEC 06, 2021
OUTCOME BASED EDUCATION
by Dr. Sohaib

SEP 24, 2021
INTERVIEW WITH AN ENTREPRENEUR
by Anum Kamran

JUNE 03, 2021
WEB DESIGNING WITH BOOTSTRAP
by Ms. Rabiya Ameen

MAY 27, 2021
SCORE YOUR FIRST FREELANCING JOB
by Ms. Asra Rizwan

PUBLICATIONS 2021-2022

JOURNAL PUBLICATIONS

Network intrusion detection using Oversampling technique

Hafiza Anisa Ahmed, Anum Hameed, Narmeen Zakaria Bawany, "Network intrusion detection using oversampling technique and machine learning algorithms", PeerJ Computer Science, 2022

Accurate Prediction of Immunoglobulin Proteins using Machine Learning model

Ahsanullah Unar, Dhani BuxTalpur, "Accurate prediction of immunoglobulin proteins using machine learning model" Informatics in Medicine Unlocked, Volume 29, 2022, 100885,

CaPBug-A Framework for Automatic Bug Categorization

H. Anisa Ahmed, Narmeen Z. Bawany and J. A. Shamsi, "CaPBug-A Framework for Automatic Bug Categorization and Prioritization Using NLP and Machine Learning Algorithms," in IEEE Access, vol. 9

Impact of COVID-19 on Higher Education in Pakistan

Tehreem Qamar, and Narmeen Zakaria Bawany. "Impact of COVID-19 on Higher Education in Pakistan: An Exploratory Study." IJERI: International Journal of Educational Research and Innovation 15 (2021): 503-518.

AFP-CMBPred: Computational identification of Antifreeze Proteins

Ali, F., Akbar, S., Ghulam, A., Maher, Z. A., Unar, A., & Dhani Bux Talpur (2021). AFP-CMBPred: Computational identification of antifreeze proteins by extending consensus sequences into multi-blocks evolutionary information. Computers in Biology and Medicine, 139, 105006.

The Design and simulation of low side lobe micro-strip array antenna

Narwani, K., Jamshid, J., Nabi, A. U., Saifullah Adnan & Iqbal, K. (2021). The Design and simulation of low side lobe micro-strip array antenna at different frequencies. Journal of Engineering Research.

Joint low-rank prior and difference of Gaussian filter for magnetic resonance image denoising.

Chen, Z., Zhou, Z., & Saifullah Adnan. (2021). Joint low-rank prior and difference of Gaussian filter for magnetic resonance image denoising. Medical & Biological Engineering & Computing, 59(3), 607-620.

Model Vector Machine Tree Classification for Software Fault Forecast Model

Malik, Maaz Rasheed, Liu Yining, and Salahuddin Shaikh, "A Model Vector Machine Tree Classification for Software Fault Forecast Model (TSMO/TSVM)" International Journal of Advanced Networking and Applications

CONFERENCE PUBLICATIONS

A Secure Smart City Framework and Threat Model

Soomaiya Hamid, Narmeen Zakaria Bawany. (2022) ACIDS: A Secure Smart City Framework and Threat Model.4th International Conference on Wireless, Intelligent and Distributed Environment for Communication.

NFTs: Applications and Challenges

W. Rehman, H. e. Zainab, Javeria Imran and Narmeen Z. Bawany, "NFTs: Applications and Challenges," 2021 IEEE, 22nd International ACIT, 2021, pp. 1-7

Blockchain Based Security and Privacy in VANETs.

Iqbal, Sana, Narmeen Zakaria Bawany, and Ayesha Zulfiqar. "Blockchain Based Security and Privacy in VANETs." ICDTA'21 , pp. 469-482. Springer, Cham, 2021.

Multilevel Classification of Pakistani News using Machine Learning

Anum Ilyas, Surayya Obaid and Narmeen. Z. Bawany, "Multilevel Classification of Pakistani News using Machine Learning," 2021 22nd International Arab Conference on Information Technology (ACIT), 2021, pp. 1-5

SDN Control Plane Security: Attacks and Mitigation Techniques.

Kiran Fatima, Kanwal Zahoor, and Narmeen Zakaria Bawany. "SDN Control Plane Security: Attacks and Mitigation Techniques." ACM Proceedings of the 4th International Conference NISS

SEALYC: An IoT Based Solution for Smart Community

Sadia Javed, Ummay Faseeha, Samia Ghazala. "SEALYC: An IoT Based Solution for Smart Community", International Conference on Biological Research and Applied Sciences (IBRAS) 2021.

Cyber Security and Android Hacking; An Awareness for Android Users

Syeda Tooba Kazmi "Cyber Security and Android Hacking; An Awareness for Android Users", International Conference on Biological Research and Applied Sciences (IBRAS) 2021.

Improved MR image denoising via low-rank approximation and Laplacian-of-Gaussian edge detector

Qiu, X., Chen, Z., Saifullah Adnan, & He, H. (2020). Improved MR image denoising via low-rank approximation and Laplacian-of-Gaussian edge detector. IET Image Processing, 14(12), 2791-2798.

STUDENT SOCIETIES

DRAMATIC SOCIETY

Dramatic Society is a society that caters to individuals interested in performing acts and plays and helps its members acquire other useful operational, business and human skills extremely important for one's growth and development. Dramatic Society of JUW, since its inception, has been preparing students to live and work in a world that is increasingly TEAM-ORIENTATED rather than hierarchical. It aims to provide individuals with a platform to express themselves, pursue new theatrical endeavors, experience novel opportunities, and give back to society in the form of art

COMMUNITY WELFARE SOCIETY

Community Welfare Society was founded with the sole intention of making the world a better place to live. CWS has followed this mission from its foundation, and has engaged in a variety of initiatives to improve the lives of the less fortunate in our community. CWS hosts a wide range of events, including Blood Camps, Medical Camps, Water and Food Distribution, Environmental Hazards Prevention Programs, and more. Plantation drive to combat environmental issues was the most successful event of this society.

ROBOTICS SOCIETY

As technology is continuously transforming our world, students must stay up with current advances in science, information technology, and robotics, as well as learn digital age skills. The Robotics Society works to enhance robotics and automation engineering theory and practice among its members. Its mission is to promote the advancement and exchange of scientific and technological knowledge in Robotics and Automation for the benefit of its members, the profession, and humanity. It aspires to be the most well-known and successful robotics and automation organization

ENTREPRENEURSHIP SOCIETY

Since its inception, the Entrepreneurship Society has fostered and equipped students for the future. It serves as a platform for implementing and exercising academically learned abilities, with the goal of aiding and developing aspiring business women. Its mission is to teach students about many facets of entrepreneurship. Under this society, its members have always been empowered to develop their skills and abilities, bring new ideas, products and employ other people to create a healthy standard of living.

STUDENT SOCIETIES

DEBATING SOCIETY

Debating Society finds way to celebrate diversity and debates with intellectual ideas. Through logical consistency, factual accuracy and some degree of emotional appeal our debaters have been able to captivate the audience's attention. The university has boasted the most refined tongues and sharpest minds through its dramatic society. Business plays by the name of Business snapshots have become the most successful series of plays which is a fruit of team-work.

CHARACTER BUILDING SOCIETY

the core objectives of this society are Spreading awareness, designing activities, strengthening the character Highlighting basic human rights, Personality builds up, Character building and Helping students how to think out of the box and how to be self-dependent as this society strongly understands and believes in the significance of co-curricular activities and promoting youth talent besides educational curriculum.

MATHELETE SOCIETY

At Mathelete society, our primary goal is to foster an open mathematical community. We will accomplish this by sponsoring numerous social activities and establishing lasting university experiences. We seek to create and foster a more personal and engaging contact between staff and students. We also aim to encourage those outside of the mathematical program to study and enjoy mathematics at Jinnah University for Women. Under the hood of this society, we are intended to help students improve their analytical, logical, critical and creative thinking in a fun way

CYBERSECURITY SOCIETY

The Cybersecurity Society provides cybersecurity education and awareness on cybersecurity latest trends. We host a variety of events related to cyber security, such as cybersecurity latest trends events, talks from academic and industry experts, and cyber security-related socials. We strive to make cyber security as accessible as possible, so you can take part regardless of what skill level you are at!

Jinnah University for Women has been imparting education in more than 25 disciplines including Pharmacy, Microbiology, Biotechnology, Food Science and Technology, Computer Science, Pharmacy, Social Sciences and others for more than two decades. The university has a strong alumni base of almost twenty thousand graduates who have been awarded Bachelors, Masters, MS/MPhil, and PhD degrees in various disciplines. More than 300 qualified and dedicated female faculty members are currently engaged in teaching and research activities with 6000 students.
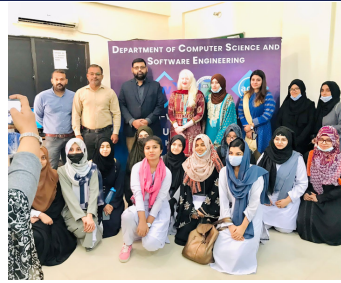
VISION 99

Department of Computer Science and Software Engineering aims to serve the nation by preparing a generation of ethical, visionary and innovative female computing professionals and researchers
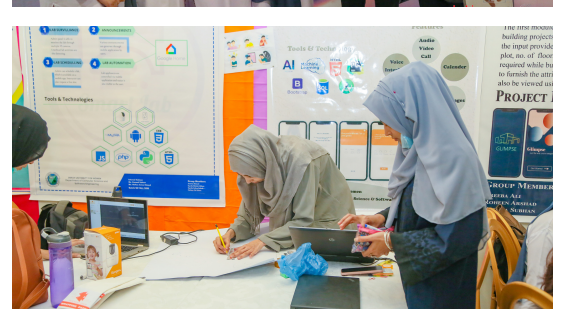
MISSION

- Provide high quality academic programs in computing
- Provide an outstanding educational experience in the contented environment for females
- Provide a platform for promoting collaborative and multidisciplinary activities in service of community
- Instilling strong ethical values, professional behavior, research capabilities and leadership abilities.

PROGRAMS WE OFFER
Affiliated with NCEAC

BS(CS)
4-Year Degree Program

BS(SE)
4-Year Degree Program

MS(SE)
2-Year Degree Program

PhD(CS)
3-4-Year Degree Program

UPCOMING EVENTS

WOMEN IN COMPUTING

JTECH-2023

BUSINESS SNAPSHOT

GDSC EVENTS

IBRAS 2023

P H O T O   G A L L E R Y

JTECH-2022 ‖ WIC ‖ IBRAS-22

ALUMNI MEETUP

The department of Computer Science and Software Engineering's Alumni Meetup was another highlight of this year. For any institution, alumni are the ones who develop identity of their alma mater and bring prestige to its name. In this two-decade long journey, hundreds of students have taken graduation cap from this place and now many of them are serving in public and private sectors. This meetup was held on 5th of June, 2021 virtually to provide more alumni the opportunity to participate in it.

The department received an overwhelming response on this idea. As it was the first-ever virtual meetup, things were little different. Breakout rooms were created where students were able to have conversations with faculty. And along with that, the main session was taking place in which Alumni stated their thoughts about their professional journey and about their experience as students of Department of Computer Science and Software Engineering, JUW. Such activities increase the chances of making joint efforts for solving the issues that are common in the community.

The majority appreciated this endeavor of bringing back to the place where they all started. Many of them who are living abroad were happy to be able to interact with their Honorable teachers, especially Professor Dr. Narmeen Zakaria Bawany, Chairperson of the Department who has been associated with the Department since its beginning.

NOTABLE ALUMNI

Ms. Shamaila Rehman, Principal Software Engineer, Old Republic Title Insurance, United States
Ms. Faiza Ateeq, Senior Product Owner, T-Mobile, Seattle, Washington, United States
Ms. Ayman Haseen, Senior Security Engineer, Verizon, Belgium
Ms. Raneem Rashid, Smart Chain Full Stack Developer, Riyadh, Saudi Arabia
Ms. Ramsha Ali, Exam Invigilator, Trinity Academy, Inc., United States
Ms. Naila Parveen, Research Assistant, University of Sharjah, UAE
Ms. Humda Jafary, SQA Engineer, Liberty Tax, United States
Ms. Ayesha Kaleem, Backend Developer, Infinite Devices GmbH, Germany
Ms. Anum Kamran, CEO, Buyon.pk, Pakistan
Ms. Tabussum Wajid, Senior SQA Engineer, Viabletree, Pakistan
Ms. Nargis Anjaria, Senior Software Engineer, Shinersoft, Pakistan
Ms. Amna Jalal, Software Developer, Veripark, Pakistan
Ms. Maham Rahim Full Stack Developer Cygnis Media, Pakistan

| CSSE Website | BS(CS) Program | BS (SE) Program | MS (SE) | PhD(CS) |
| JTECH 2022 | IBRAS 2022 | ACM | Meet the Alumni | Department of CSSE |

JINNAH UNIVERSITY FOR WOMEN