



Bahria University
Discovering Knowledge
An initiative of Pakistan Navy

Pulse of **BAHRIA...**

Bugle Chapter 2, 2021

Email: marketingdirector@bahria.edu.pk

BUGLE

A journey of colors

41
International
Linkages

Research
Funding Over
PKR **240**
Million

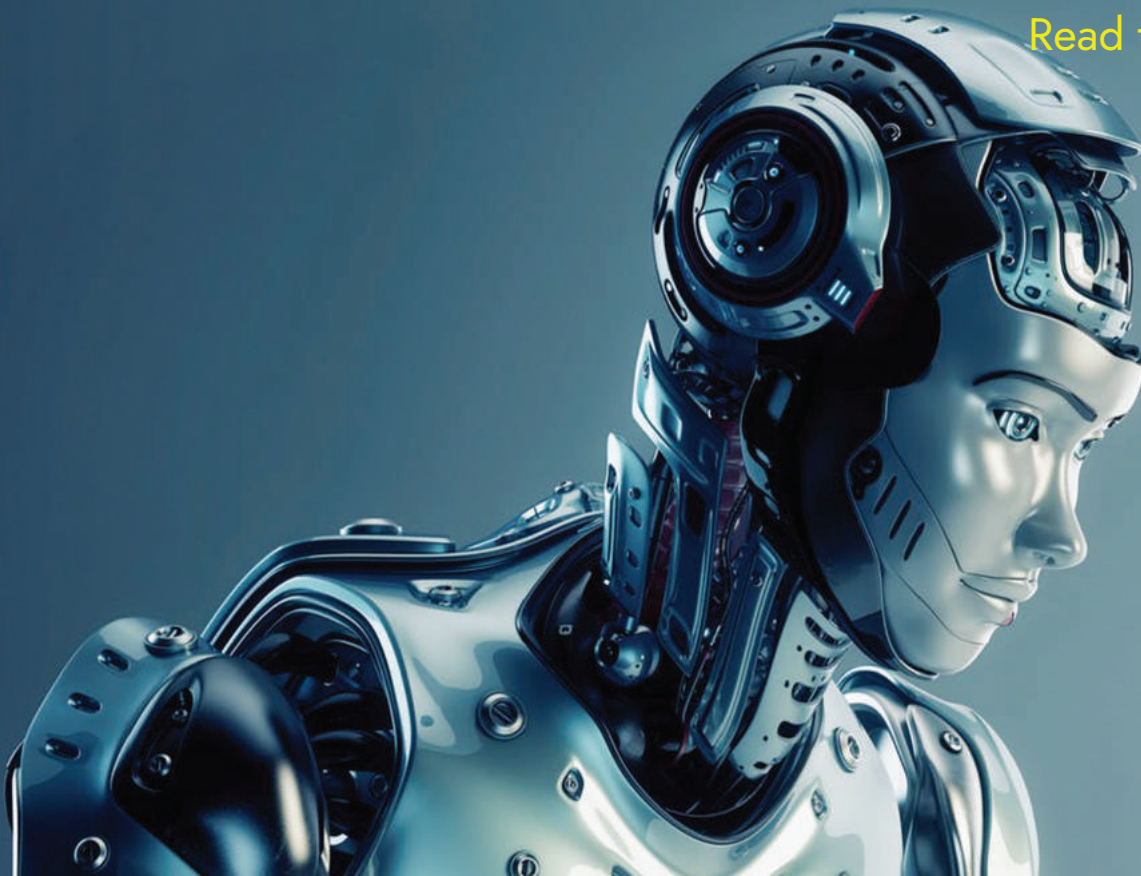
19000+
Students

Scholarship
Grants worth
PKR **164+**
Million

Introduction of **BACHELORS IN ARTIFICIAL INTELLIGENCE** @ **BU**

Bahria University endeavour's to bring forth Academic Disciplines that align with the changing world dynamics. This Fall 2021, Bahria University has introduced Bachelors in Artificial Intelligence.

[Read the full story at Page 20](#)




CONTENTS

01 **BU Alumni**
Page No 01

Sitaron Se Agay **02**
Page No 15

03 **Research Activities**
Page No 21

Hall Of Fame **04**
Page No 30



Happiness
is a
cup of coffee
and a
BUGLE

A smiling female graduate with long brown hair, wearing a black graduation cap and gown, holds a large white rectangular sign in front of her. The background is a solid light blue.

BU ALUMNI MAKING US PROUD

Alumni Success Stories



Mr. Haasan Akram

Batch of BCE 2008

Sr. Customer Success Associate at KeepTruckin
President of Rawalpindi Toastmasters Club

Mr. Hassan Akram graduated in Computer Engineering from Bahria University in 2008. After graduation, he joined Zong as a Customer Services Executive. He is a seasoned Customer Care professional with the “CAN DO” approach, ability to accept the challenges to bring things on the right track. He is a specialist in finding ways to improve customer experience by creating or revamping processes, quality grids with a buy-in of stakeholders, and managing training of resources with a focus on customer service excellence. He has been part of different SAAS (Software As A Service) based companies wherewith strong communication skills he helped multiple clients with onboarding and retention. He has a great passion for public speaking and is the current President of the Rawalpindi Toastmasters club. That is not all, he is also running a public speaking club for kids where he helps the under 18 to learn the art of public speaking free of cost.

Mr. Haasan says, *“I strongly believe in empowering youth especially kids and that is why I am running a kid’s public speaking club. My advice to students is to invest in your skills, especially digital skills because the future is all about digital skills”.*



Dr. M. Akbar CFA

Batch of PHD 2013

Senior Faculty at Birmingham City University UK

Dr. Muhammad Akbar has the honor of being the first PhD graduate of Bahria University Islamabad, specializing in Finance. His PhD research was focused on the empirical validity of competing asset pricing models in the Pakistani equity market and was awarded 'Magna Cum Laude' from Bahria University in his PhD. He served as a faculty member in the Department of Management Sciences from 2005 to 2013 before immigrating to the UK. He completed his second PhD from Cardiff Metropolitan University in 2018, investigating the intervening-effect and the role of firm opacity in the UK equity market.

Dr. Akbar is a qualified Chartered Financial Analyst (CFA) and is among the very few CFA charter holders in the world who hold two doctorates. He is also a Chartered MCSI from the Chartered Institute for Securities and Investments (CISI). He completed the Oxford Fintech Programme from the University of Oxford in 2019 and has coding skills in R and Python for financial analysis. He holds the record for highest marks and is the gold medallist in M. Com from the University of Peshawar. He received a merit scholarship in MS Finance for his outstanding grades throughout.

Dr. Akbar has an academic career that spans over more than 17 years and has taught at different HEIs in Pakistan and UK. He has been teaching specialized modules in finance and investments such as Derivatives Investments, Investment and Portfolio Management, Financial Econometrics, and others. He has also extensive experience in curriculum development including the MS Finance program for Bahria University. His research interests are in the area of asset pricing theory, market efficiency, and corporate governance. He has published in peer-reviewed national and international journals of repute in the field of finance. Also, he is an active trader and investor investing in US equities listed on Nasdaq and NYSE.



Dr. Faryal Razzaq

Batch of PHD 2013

Senior Faculty at Quaid-i-Azam University



Dr. Faryal Razzaq is an accomplished academican, Master trainer, research consultant, instructional designer, blogger for national newspapers, influencer, panelist for National TV, philanthropist, EQ education evangelist & member advisory boards for a few institutions including Bahria University Business School curriculum advisory committee for BBA/MBA and established and was in-charge of ZAB-Curriculum advisory & Regulation of Emotion Centre (SZABIST).

She is mentor; National Incubation Centre & CaterpillHER a project of Santa Clara University CA. The USA, board member Accountability Lab, fellow Founder Institute, and Miller Centre CA. Member of the Community Resilience Research Network by SDPI. She has won the Women SDG Challenge cup at Hackathon 2019, she is a scout for Amazon Web Services (AWS), approved trainer for Google signature #IamRemarkable, was selected for #StratupFridays, and 100 days' action plan by The World Bank for #GirlLearnWomenEarn initiative. She is part of the Board of reviewers for 8 research journals & Congress on Academy of Management. She is Founder of The FEEEL®, Pakistan's first digital company working on emotional preventive care. She has 5 copyrights from IPO, Pakistan. She provided consultancy for instructional designs, digitization, and bachelor program launch to Karachi School of Business & Leadership. She had been chosen as a symbol of women's empowerment by the newspaper, "Daily Times" and "Inspire Zone International" magazine.

She had been session chair and keynote speaker in many international/national conferences and delivered 100's of talks across many platforms. She has been an independent consultant for the British Council, US Embassy Islamabad, CWS (Act alliance Asia Chapter) & Karachi Education Initiative. She has trained PAF officers through Professional Development Centre (Air University), LDC Bahria University, HRDN, DOVE Foundation, Lincoln's Corner, SAARC Women Entrepreneurs Portal Islamabad Chapter. She is a role model for Pakistan Alliance for Girls Education, general body member for Pakistan Alliance for Early childhood care, advisor READ Pakistan, trainer/member Women on Board, Connected Women, Pakistan Youth Association, Be the Change, LIFT Pakistan, Professional Success Summit, Jumpstart, and Rupani foundation, etc. She has around 20 research publications in HEC recognized journals/ national/international conferences and is a member of 4 divisions, OB, HRM, Entrepreneurship, research methods in the Academy of Management. She has been awarded HEC grants twice to present her research abroad in the USA and Malaysia. She is well versed in software like SPSS, SMART PLS, NVIVO, etc. Currently, she is serving as Assistant Professor at Pakistan's premier Quaid-i-Azam university.



Ms. Maria Athar

Batch of BBA 2000 & MBA 2002
CEO of Laboutique official UAE

Ms. Maria's final thesis of MBA was called Buy&sell.com. It never materialized as she got married immediately after completing her MBA. After 15 years, the idea stayed with her and she started laboutique1 for selling preloved fashion. For promoting her business, she started blogging. Ms. Maria didn't realize at that time that blogging can be a full-time business also. And in 3 years she has achieved a lot. Ms. Maria has a following of more than 200,000 on all her social media platforms. She gives motivational talks to women to be more independent as well as do fashion and lifestyle blogging. She is running her business with the name of "Laboutique1official".

Ms. Maria says, "I have only 1 piece of advice for the students, whatever you do give your 100%, work hard with honesty and be consistent and success will be yours. I am honored that Bahria considered me worthy of posting my success story. Would love to be of any help if the students need it."



Mr. Siddique Ahmed

Batch of MBA 2010

Finance Business Partner Initial Saudi Group

Bahria University prides itself in providing the corporate world with competent and well-determined graduates who have been soaring in their respective careers not only in Pakistan but across continents. Mr. Siddique Ahmed stands tall among those with a high standing successful Banking & Facilities Management career.

As a graduate of Bahria University, his career stretches over almost 11 years! Commencing his career as General Banking Officer in 2011, Mr. Siddique worked hard to prove his ability and competence and soon got promoted to Credit Officer only in a matter of one year. After two and half years he moved to KSA as Assistant Finance Manager in Initial Saudi Group. He started from scratch and managed to get multiple promotions over eight years and is now working as Finance Business Partner for Facilities Management - handling the operation kingdom-wide.

Over the past four years, he has been working closely with CFO & CEO and ensuring accurate financial accounting, budget & reporting, commercial and pricing support to COO, ERP maintenance, and support to local & International supply chain. These work skills are reflective of his ability to analyze glitches; both at the micro & macro level and offer practical results mainly because of a strong foundation that was established during his study tenure at Bahria University.

Mr. Mirza Sohail Asghar

Batch of BBA 2008

Advisor National Joint Policy Committees at Canada Post

After exhausting his options to join the Air force, Mr. Mirza thought of giving business studies a try rather than opting for engineering degrees. It clicked, and he graduated with Summa Cum Laude and was the recipient of the gold medal (3.96 CGPA) in his batch. Soon after graduating, he scored a job with Telenor Pakistan as Accounts Payable Officer. His professional life has been a rollercoaster ride, realizing that the ladder to reach the top is slow and far. He got the opportunity to shift his career path from Finance to Project Management and eventually to Occupational Health and Safety. Mr. Mirza believes that change is the only permanent; it's hard to stick to one plan in life. You have to make crucial decisions that create and recreate your destiny. After spending 3.5 years with Telenor, he moved to Jazz (previously known as Mobilink) and, after a few years, was heading the health and safety department. In 2019, he went to Canada with his family and started working for Canada Post in Ottawa as their advisor to national policy committees. Parallel to working full-time, he completed his Masters and did another bachelor's in Occupational health and safety from the UK, besides achieving numerous safety and quality certifications.

Mr. Mirza says, "I certainly believe that Bahria University has played an essential part in preparing me to be the best and instilling the spirit of "nothing is impossible." My two cents for new students, one it is never too late to revisit your decisions if they are not working in your favor, second hard work will always pay off."



Dr. Rab Nawaz Lodhi

Batch of PHD 2014

Associate Professor of Business Management at University of Central Punjab Lahore

Dr. Rab Nawaz Lodhi is an Associate Professor of Management at UCP Business School, University of Central Punjab, Lahore, Pakistan. He teaches MBA, MS, and PhD programs. He has vast teaching, training, Research, and Industry experience in Pakistan, Malaysia, Turkey, Kazakhstan, the Netherlands, Indonesia, the Philippines, Saudi Arabia, and the United States of America (USA). He has numerous Research publications in Impact Factor Journals of Emerald, Sage, John Wiley and Sons, Springer and Taylor and Francis. He is also a Guest Editor of the Journal of Hospitality and Tourism Technology (SSCI, Impact Factor 2.796), Emerald, for a special issue on Qualitative Research in Hospitality and Tourism Management. He discovered his talent in research, training, and consultancy activities. He conducted training sessions from lower level to top-level staff in different Government and Private organizations and also provided Research Consultancies to the different project teams including USAID and Harvard University USA funded projects. He is an international trainer of quantitative and qualitative research methodologies, mixed methods design, and data analytical tools e.g., NVivo, MaxQDA, Atlas-ti, EvIEWS, SPSS, STATA, AMOS, Smart PLS, MPlus, etc. QSR International Australia certified him in 2013 as trainer and consultant of QSR NVivo 9/10 in Asia Pacific Regions. He is also a trainer of Modern Learning and Teaching Skills, Outcome Based Education (OBE), ICT in Higher Education, Blended and Flipped Learning. More than 50 universities and Research Institutes have invited him for the different training programs and funded research projects.



Mr. Fahad Arif

MS (Project Management) 2016 PMO

MECSOL Engineering Services & Mecsol Pakistan

Mr. Fahad Arif Sheikh is holding Bachelor's degree in Mechanical from the University of Engineering & Technology (UET), Lahore followed by an MS degree in Project Management from Bahria University, Lahore Campus. He is having his specialization in PMO (Project Management Office) & Supply Chain, certified for implementation of PMO in Mecsol Engineering Services & Having a deep study in supply chain strategies of different globally recognized brands like IKEA, Dell, ZARA, McMaster-Carr, Haute Couture, Waitrose & Walmart, etc & have the honor to be a part of a core team member to design the Supply Chain Strategy for Asia Poultry Feeds.

Mr. Fahad is also a Certified Metal Designer from National College of Arts (NCA), Lahore and also holds a Certificate of Graduation in Goal Setting & Planning from Lahore University of Management Sciences (LUMS), Lahore.

Mr. Fahad is a registered member of Project Management Institute (PMI), USA & was also part of mega projects like Sialkot International Airport, Punjab Safe Cities Project (PPIC3) Lahore, Pakistan Gulpur Hydro-Power Project, Kashmir & Karakorum Luxury Apartment, Islamabad, etc. He also worked with different National & Multinational organizations like HUAWEI Technologies, Inbox Business Technologies, NESPAK, AL-Imam Enterprises, Lotte Engineering & Construction, Daelim Engineering & Construction, etc. Mr. Fahad is currently Leading the PMO for MECSOL Engineering Services & Mecsol Pakistan.





Mr. Ahmad Azaz

MS (Project Management) 2018

Project Manager Solar Company, DCH Solargiga (Pvt.) Ltd

Professionally qualified Electrical Engineer, having more than 3 years of valuable technical experience with a demonstrated history of working in the renewable Industry. Currently serving as a Project Manager in a solar company (DCH Solargiga). DCH Solargiga (Pvt.) the daughter company of DCH Solargiga GmbH, Germany. DCH Solargiga provides EPC turnkey solutions for PV Solar Projects and also works as a trader for high-quality solar modules, inverters, and engineering solutions.

Mr. M. Hashim Shah

MS Project Management 2013

Head of Procurement Punjab Population Innovation Fund - PPIF

With 19 years of professional experience in Procurement and Project Management, he is heading the Department of Procurement in one of the core entities of the Government of Pakistan. Previously he has served the Government of Punjab, the Government of Pakistan, Bahria Foundation (a subsidiary of Pakistan Navy), and ZONG (CMPak) telecom.



Mr Usman Saleem

MS (CS) 2017

HOD Department of Computer Science Unique College (UC)
Lahore Campus

He received his MS degree in Computer Science from Bahria University Lahore, Pakistan. Currently, he is working as a HOD Department of Computer Science in Unique College (UC), Lahore campus. Mr. Usman has 7 years of experience in teaching, management, and sports activities. He has received a teaching performance award in 2015 from the Jinnah Islamia Group of College(JICC) and in 2019 from Unique College(UC). On 7 January 2021, he published his paper in Tech Science Press.



Mr. Usman Bakhat

MS (CS) 2017

Police Communication Officer Punjab Safe
Cities Authority

In 2016 he joined Punjab Safe Cities Authority as a Police Communication officer. In December 2019, Punjab Police launched its Web TV channel to show a positive image of the police and to work on a distorted image of Police in Public. He had no experience of media or public speaking but after making his debut as being an anchor, he got the privilege to interview "Chief Ministers Punjab and Balochistan". Moreover, interviewed United Nation Country Heads of UNFPA & UNDSS, Senior Police Command, Telemedicine for corona at peak of coronavirus and did almost 100 awareness shows and Interviews.



Mr. Abdul Rafay

Batch 2014
Bba & Mba | BUKC

From college to a full-time professional, the transition is always fraught with barriers and roadblocks. It's not just the learning & knowledge that helps you to grow, but also the mistakes you make and the courage to acknowledge & improve upon them that leads to a successful career path. Interestingly, this thought commenced the transition of me becoming a consummate professional and Mr. Abdul Rafay highly attributes this to prestigious Bahria University. With his 6+ years at the university gaining knowledge, experience, respect, and valuable relations, he was Event Management head for 3 years leading 31 educational & 16 entertainment projects which included some of the largest events like Noori Concert, Basant Festival, BUMUN, and DJ Party 2012. Based on the primary skill he gained at the university, he started his journey into the real world by joining an event management co. organizing wedding events at SHB & cricket matches screening at port grand. This helped him gain hands-on experience which gradually led to the inception of launching a start-up with a couple of friends. They initiated Pakistan's first social media-based clothing line under the brand called "Loud Tees". Souq.com was later acquired by the largest e-Commerce Company in the world "Amazon" in 2017. This helped him grow the scope of work and he was soon made Retail Vendor & Category Manager for Toys in 2018 [one of the highest valued categories]. He has worked closely with world-renowned brands such as Lego, Hasbro, Mattel, Xiaomi, Black & Decker, Nike, and Adidas. The passion and enthusiasm for work lead him to outperform and he was soon recognized with the "Awesome Amazonian" award in the first All hands meeting 2019 (UAE).



Mr. Fazal Ur Rehman Faisal

EE BUKC Batch: 2013-2017 (Gold Medalist) Global Korea Scholarship
(GKS- G) Scholar

Master's in Information & Communication Engineering (In process
Chosun University, South Korea

He became a part of Bahria University for his undergraduate studies and chose Bahria University because of its reputation on the National and International levels. The distinguished faculty of BU and the latest equipped laboratories broadened his horizon and provided him a chance to acquire professional skills in his field. His success from the platform of BU is evident from his excellent academic record, which further helped him to secure one of the prestigious scholarships (Korean Government Scholarship) in the world for his higher studies.



Mr. M. Abubakar Islam

MS (Project Management) 2016

Assistant Vice President National Bank of Pakistan

Mr. Abu Bakr is AVP in the National Bank of Pakistan. He approved the e-Learning Project Budget after presenting it properly to the Board with the help of the knowledge and techniques in his MS PM Program. Exactly used the same tools and techniques in presenting the budget to the NBP Management and they approved it and executed the project.



SITARON SE AGAY

FOR BAHRIANS

HEC EHSAAS UNDERGRADUATE SCHOLARSHIP PROGRAM

To create equal educational opportunities for everyone, Bahria University received huge funding from the Government of Pakistan under Ehsaas undergraduate scholarship program. It is known to be the largest need-based undergraduate scholarship program. Under this program, every year, thousands of students are being facilitated by receiving scholarships. In Phase-I, Bahria University had secured 176 scholarships seats. Subsequently, in Phase-II, 178 scholarships were awarded to BU students. And during the financial year 2020-21, Rs. 67 million have been successfully received and disbursed among students to support the drive for education among the students who would have discontinued studies due to their financial constraints.

BU SPONSOR A STUDENT SCHOLARSHIP PROGRAM

Every year BU facilitates students who face financial instability. For this year 2021, Bahria University has sponsored 15 students by granting these scholarships and an amount of Rs. 1.9 million has been awarded to them. These scholarships are funded by 8-10 donors who are affiliated with Bahria University such as Ms. Alysa Baig scholarship, Late Mrs. Ghazala Shahid scholarship, Mr. Khawaja Sadiq Naveed Danial, and a few more. This, in turn, encourages and supports students to undertake an honors degree or specific research.

BU Sponsor A Student Scheme			
S.No.	Types of Scholarships	2020-21	
		No. of Scholarships	Amount Awarded (Millions)
1	BU Sponsor A Student	15	1.891

SCHOLARSHIP PROFILE – BAHRIA UNIVERSITY (FY 2020-21)

Scholarships allow students to follow their dreams which in turn positively affects their performance. A various number of internal and external scholarships i.e. Merit Scholarships, HEC need-based scholarships, HEC Ehsaas Undergraduate Scholarships are offered here at Bahria University. Thus, allowing students more time and energy to focus on their studies. A total of 3548 scholarships, inclusive of internal and external, have been awarded to the students. The total amount disbursed among students is Rs. 199 million. Bahria University gives students an incentive to perform well academically and work consistently towards completing their degree within the specified time.

Summary of all Internal Scholarships for FY 2020-21			
S.No.	Types of Scholarships	2020-21	
		No. of Scholarships	Amount Awarded (Millions)
1	Advance Merit Scholarship	593	15.385
2	Merit Scholarship	1450	49.889
3	Indigent Scholarship	3	0.072
4	BU Qarz e Hasna	551	21.07
5	Financial Assistance Scholarship	361	11.608
6	Naval Shuhda Waiver	2	0.861
Total of Internal Scholarships		2960	98.885

All External Scholarships Awarded			
S.No.	Types of Scholarships	2020-21	
		No. of Scholarships	Amount Awarded (Millions)
1	HEC Need-Based	149	16.23
2	Punjab Education Endowment Fund (PEEF)	22	1.289
3	HEC-Provision of Higher Education opportunities for the students of Baluchistan & FATA	5	0.195
4	HEC-Prime Minister Fee Reimbursement Scheme for less developed areas of Pakistan (selected regions) PhD Only	12	0.719
5	HEC Ehsaas Undergraduate Scholarship	354	67.632
6	Allama Iqbal Scholarship for Afghan Nationals	19	5.85
7	HEC Law Graduates Scholarship	8	2.564
8	NESCOM Fellowship Program	8	1.64
9	HEC Indigenous 5000 Fellowship Program	7	2.813
10	International Committee of Red Cross	4	0.809
Total of External Scholarships		588	99.746

BU INTEREST-FREE LOAN SCHEME

To increase equitable access to further education and to support underprivileged students, Bahria University has made its loan scheme available to brilliant but needy students. It mainly comprises of 2 types of Loans i.e. Student Study Loan and Laptop Loan Scheme. During the financial year 2020-21, a total of 71 scholarships for Student Study Loan with Rs. 4.77 million have already been disbursed. Subsequently, a total of 82 loans for laptops with Rs. 6.56 million have been given to students this year.

BU Interest-Free Loans			
S.No.	Types of Scholarships	2020-21	
		No. of Scholarships	Amount Awarded (Millions)
1	Student Study Loan	71	4.77
2	Laptop Loan Scheme	82	6.56



AI & ROBOTICS

Bahria University endeavour's to bring forth Academic Disciplines that align with the changing world dynamics. This Fall 2021, Bahria University has introduced **Bachelors in Artificial Intelligence.**

Two main directions of research are widely acknowledged. One is to understand natural intelligence by the use of computer models. The other provides techniques and technology for building systems capable of intelligent decisions and actions. Thus AI is both a science and an engineering discipline. Bahria University BS AI graduates may seek employment in trades, industries and professions that rely heavily on computing systems. BU students would be able to seek employment as **Machine Learning Engineer, Data Scientist, Business Intelligence Developer, Big Data Engineer** or several other exciting jobs.

Pave your career path with Bahria University and BU!



RESEARCH ACTIVITIES



ISLAMABAD CAMPUS

“Abnormal Eating Attitudes and Body Image Dissatisfaction among University Students: An Exploratory Study”. Pakistan Journal of Clinical Psychology. 18(2).

Research was aimed to explore the relationship between abnormal eating attitudes and body image dissatisfaction among university students

Sample and Methods: 249 university students (female= 136 & Males= 113) were taken from Public, Private and Semi-Government Universities of Rawalpindi and Islamabad. Body Shape Questionnaire-34 was used to assess the body image dissatisfaction while Disordered Eating Attitude Scale was used to assess abnormal eating attitudes.

Results and Conclusion: It was found that the body image dissatisfaction significantly predicts abnormal eating attitudes among university students, and contributes 33% of the variance in abnormal eating attitudes. It was found that the body image dissatisfaction significantly predicts abnormal eating attitudes among university students.



Authors

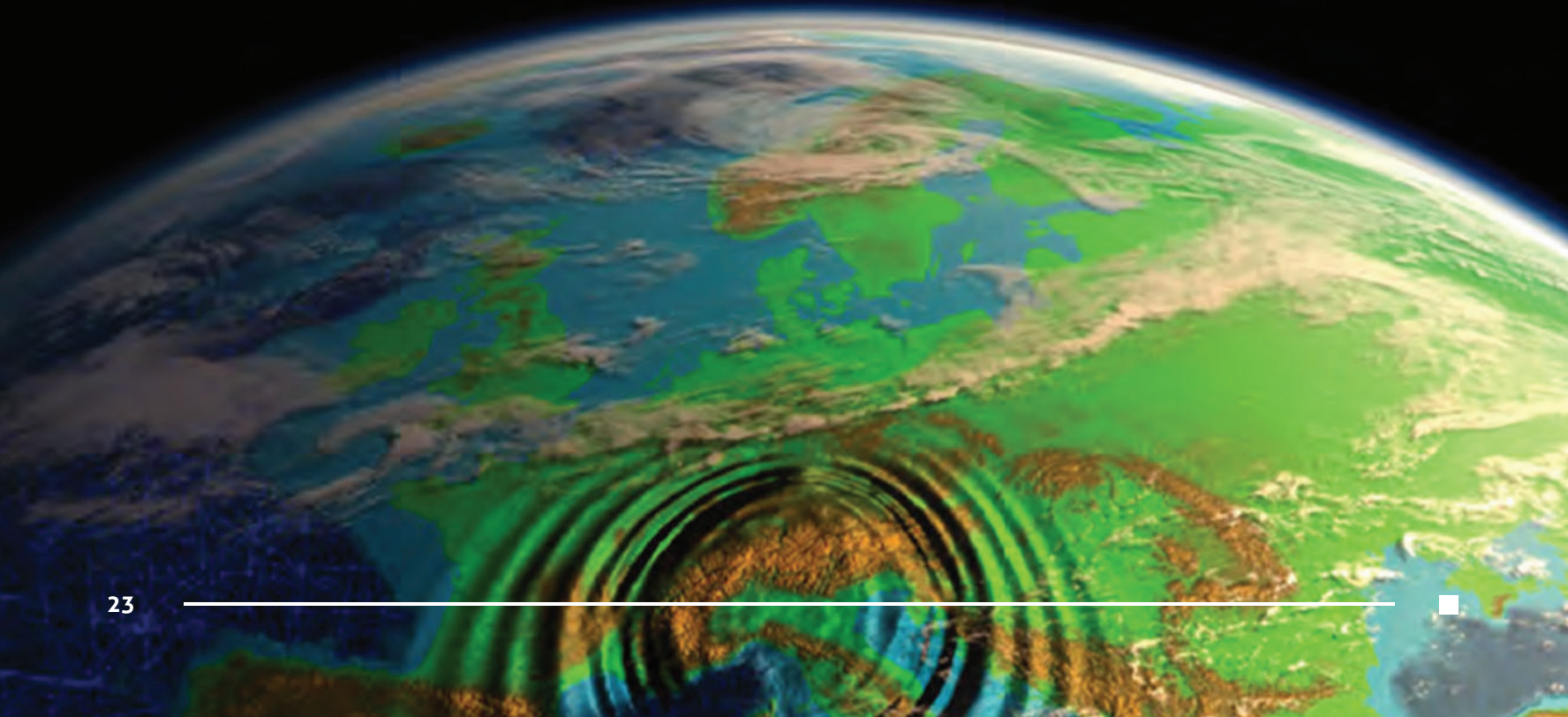
Dr. Noshi Iram Zaman, Ms. Faiza Nisar,
Ms. Shazia Yusuf, Mr. Mohammad Aslam Khan

Possible Thermal Anomalies Associated With Global Terrestrial Earthquakes During 2000-2019 Based on MODIS-LST

The recent advances in satellite-based earthquakes (EQs) precursors provide an opportunity to correlate the seismic variation on lithosphere with atmosphere during the EQ preparation period through a rigorous atmospheric monitoring system. In the present study, seismic-induced thermal anomalies from cloud-free satellite thermal images of **Moderate Resolution Imaging Spectroradiometer-Land Surface Temperature (MODIS-LST)** are analyzed within a time interval of three months (precedent two months and succeeding one month to each EQ day) of 13 $M_w \geq 6.0$ terrestrial EQs during 2000-2019. All these EQs occur in **low vegetation and no snow cover regions** except M_w 6.7, Siberia Russia event. Remote sensing data show evidence of significant perturbation with reference to confidence bounds in LST within 5-20 time window upon the antecedent and the descendant of EQ day. The studied thermal anomalies are obtained from LST values over the epicenter region. This work endorses the performance of MODIS-LST for detecting EQ-induced thermal anomalies in terrestrial regions with no vegetation and snow cover and also assisting to the development of lithosphere-atmosphere hypothesis over the epicenter region.

Author: Munawar Shah, Muhsan Ehsan, Ayesha Abbas, Arslan Ahmed, Punyawati Jamjareegulgarn

Published in IEEE Geoscience and Remote Sensing Letters, Impact Factor 3.966, Journal Citation Reports, Thomson Reuters



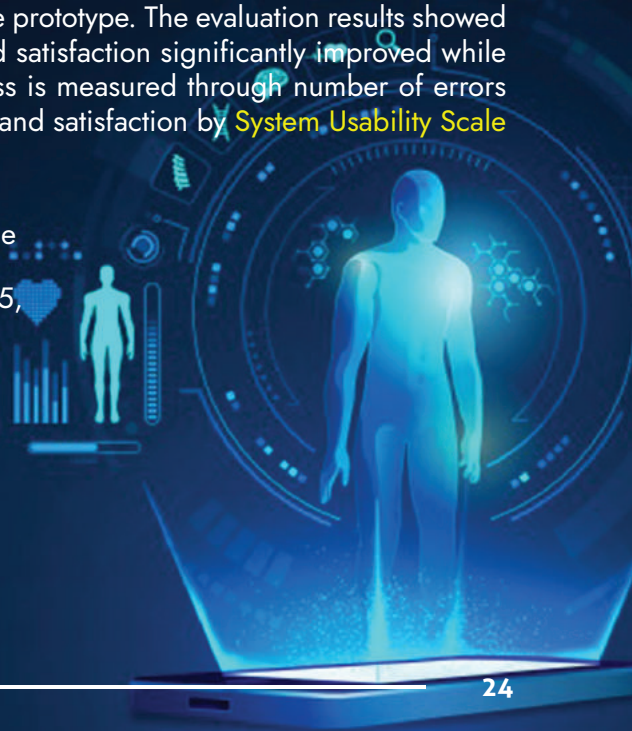
Designing an Online Appointment System for Semiliterate Users

Information and Communications Technology (ICT) has revolutionized the healthcare leading to provision of e-Health facilities remotely. During the peak time of COVID-19, as the long queues at health care facilities can result in spread of the virus. ICT can play an effective role especially for reducing the extended waiting time of patients to consult a medical practitioner which is considered as a source of hazard during the pandemic. However, in developing countries where majority population is semiliterate so find difficulty when come into contact with appointment systems which are not particularly designed keeping in consideration the requirements of semiliterate users. It is extremely important to better understand how to design user interface which allow semiliterate users to effectively perform the tasks. So there is a dire need to develop a simple, effective, easy to learn user interface (UI) of an online appointment system for the productive doctor-patient consultation. Therefore, this study aimed to providing an effective user interface of web based online appointment system to semiliterate users through **User-Centered Design (UCD)** methodology.

To achieve this, a prototype was designed to overcome issues in the existing appointment systems gathered through a field study. The needs and expectation for semiliterate users were fulfilled by incorporating the requirements of UI development for the target users. A sample of forty-two semiliterate users was used to evaluate the prototype. The evaluation results showed that semiliterate users' performance measured using—effectiveness, efficiency and satisfaction significantly improved while interacting with the prototype as compared to existing interfaces. The effectiveness is measured through number of errors and tasks accomplished in UI, efficiency by the time required to complete the task and satisfaction by **System Usability Scale (SUS)**. The SUS score improved from **50.8 to 77.6** for the prototype.

Author: Sarah Chaudhry, Fakhra Batool, Abdul Hafeez Muhammad, Ansar Siddique

Published in Intelligent Automation & Soft Computing, Vol.28, No.2, pp. 379-395, 2021, with impact factor 1.27



KARACHI CAMPUS

Optimal Surveillance Mitigation of COVID-19 Disease Outbreak: Fractional Order Optimal Control of Compartment Model

The structure of the model is in line with generalized proportional fractional derivative to assess the effects at each chronological change. Awareness about using **medical mask**, **social distancing**, frequent use of sanitizer or cleaning hand and supportive care during treatment are the strategies followed worldwide in this fight. Taking these into consideration, the optimal objective function proposed for the surveillance mitigation of COVID'19, is contemplated as the cost function. The effect analysis is supported through graphs and tabulated values. In addition, sensitivity inspection of basic reproduction number is also carried out with respect to different values of fractional index and cost function. Ultimately, **social distancing and supportive care of infected are found to be significant in decreasing** the basic reproduction number more rapidly.

Author: Dr. Oyoon Abdul Razzaq, Daniyal UrRehman, Najeeb AlamKhan, AliAhmadian, MassimilianoFerrara

Published in Journal of Results in Physics 20 (2021) 103715 having an impact factor 4.019

A Novel Safety Message Dissemination Framework in LTE-V2X System”

Vehicular communication plays a crucial role in improving road safety and maintaining traffic efficiency through the exchange of safety messages. Besides road safety, it can also be used to support other nonsafety features such as infotainment services, traffic management, parking assistance, and so on. In this article, we explore a hybrid long term evolution vehicle-to-everything architecture where we use both **vehicle-to-infrastructure (V2I)** and **vehicle-to-vehicle (V2V)** communication to simultaneously provide high throughput for infotainment services and maintain high reliability and low transmission delay for the safety messages. To this end, we propose V2I and V2V resource allocation algorithms which support a strict allocation priority for the safety messages over the nonsafety messages. We evaluate the performance of the proposed algorithms by extensive simulations using **OMNeT++**, **INET**, and SimuLTE softwares and analyze the simulation data using MATLAB software. The simulation results indicate that, as compared with using only V2I communication, the proposed algorithms decrease the end-to-end delay (**23%, on average**) of the safety messages with little degradation (**< 10%, on average**) in throughput of the background traffic. We compare our proposed algorithms with the existing algorithms and find that the proposed algorithms show a performance gain of **36.5%** and **45%** in terms of end-to-end latency and packet reception ratio, respectively.

Eshita Rastogi, Mukesh Kumar Maheshwari, Abhishek Roy, Navrati Saxena, Dong Ryeol Shin

Published in Transactions on Emerging Telecommunications Technologies, vol. pp, no. 99,



INSTITUTE OF PROFESSIONAL PSYCHOLOGY

International Journal Publications

Dr. Kiran Bashir Ahmed, HOD IPP, and Ms. Tabinda Afzal, Senior Lecturer IPP were successful in getting their article published in an international journal named as 'Evaluation Studies in Social Sciences'. Their article was titled as **"Impact of the Wellness Recovery Action Plan (WRAP) on the Psychiatric Patient with Symptoms of Psychosis"**.

The Principal, Dean and Director, IPP, Dr. Zainab Hussain Bhutto in collaboration with Ms. Hina Saleem, IPP Alumna were successful in getting their article published in the 'Pakistan Journal of Clinical Psychology' **'A Comparison Between Coping Strategies of Bullied And Non-Bullied Adolescents'**.

Dr. Kiran Bashir Ahmad, HOD IPP, in collaboration with IPP Alumni Ms. Maria Waris Nawaz, Ms. Shumaila Imtiaz, Ms. Syeda Sadia Anwer and Ms. Seema Siddiqui published their article in an international journal 'Asian Journal of Social Sciences and Management Studies'. Their article was titled as **"Coping Strategies in Adolescent Siblings of Individuals with and Without Physical Disability"**



Conference Papers

Under the supervision of Ms. Sehr Sulaiman, Lecturer, IPP, Students of Institute of Professional Psychology, Ms. Ramsha Sajid Kushtiwala, Ms. Fizza Rizwan and Ms. Sanya Salman, secured best paper award in 11th International Annual Conference held by "Pakistan Association of Cognitive Therapists" Title of the paper presented was "Coping through crisis: An Intergenerational Comparison of Perceived Stress and Coping Strategies during Covid-19 Lockdown."

Dr. Sheeba Farhan, Assistant Professor IPP and Ms. Tooba Atif, presented a research paper named 'Relationship of Ego resilience, Perceived Social Support and Depression with Job Satisfaction among Working Females' in a Two Day "STEMS International Conference" organized by The Islamia University of Bahawalpur.

Dr. Sheeba Farhan, Assistant Professor IPP and Ms. Rabia Muzaffar, Lecturer, IPP, along with their students Ms. Nasreen Asif, Ms. Tahura Khalid, Ms. Munazzah Sheikh and Ms. Urooj Anwer presented a research paper named 'Prosocial Behavior in Adults: The Role of Perceived Parental Styles & Sibling Relationship' in a Two Day "STEMS International Conference" organized by The Islamia University of Bahawalpur.

HEALTH SCIENCES

Dedicated Research Contribution Medical And Dental Section

Artificial intelligence Technique analysis, application and outcome in dentistry- A Systemic Review

Dr. Farzeen Tanwvir, Associate Professor and HOD of Periodontology published research paper *"Rural—Urban Disparities in Patient Satisfaction with Oral Health Care: a Provincial Survey"* in BMC Oral Health Journal in May 2021 (Impact Factor: 3.16).

Dr. Afsheen Maqsood Associate Professor, Department of Oral Pathology published *"Artificial Intelligence Technique Analysis, Application and Outcome in Dentistry- A Systemic Review"* published in Biomed Research International (Impact Factor 2.58).

Dr Hadi Zahid Rao, Registrar, Department of Oral Surgery published *"An Intrafamilial Phenotypic Variability in Ellis-Van Creveld Syndrome due to a Novel 27 bps Deletion Mutation"* in the American Journal of Medical Genetics 2021 (Impact factor 2.37)

Dr. Beenish Fatima Alam, Senior Assistant Professor and HOD Oral Biology and Dr. Madiha Anwar, Senior lecturer department of Oral Biology published their paper *"Motivation and Job Satisfaction Levels Among Medical and Dental Faculty Members of Pakistan Amidst the COVID-19 Outbreak"* in the journal WORK in June 2021 (Impact Factor 1.5)

Dr Melsa Gul, Senior Registrar, Department of Operative Dentistry, published paper on *"Effect of full Sulcular Versus Papilla Sparing Flap on Periodontal Parameters Periradicular Surgeries: A Systematic Review and Meta-analysis"*, in Journal of Indian Society of Periodontology in June 2021. (Impact factor 1.25)



Muhammad Ali Qasim Khan

Innovation Officer, Bahria Incubation Center Islamabad

Mr. Ali is an ardent **Marketing Strategist**, a **Social Entrepreneurship Expert**, and a **consultant** to many International and National organizations in Pakistan. He has worked and contributed to multi-themed developmental projects and legislative portfolios. Mr. Ali has over **12 years** of experience in Project Management, Business Development, Institutional & Public Consultation, Program Development, Curriculum Development, Capacity enhancement programs related to **Women Empowerment/ Social Entrepreneurship**, Innovation, and Education.



Mr. Ali Currently is responsible for managing the Business Innovation and Development aspects of various Startups at Bahria Innovation Center as its Innovation Lead, by working with a team, designing, and creating specialized ICT solutions, providing consultancy, creative marketing, and business solutions to SME's and new ventures in Pakistan.

His areas of focus include planning, brand management & monitoring, applied research, evaluation, implementation, and commercializing of the said project activities. Developing a detailed implementation plan for the project reflecting required tasks, and timeframe for implementation, financial requirements, stakeholder/investors management, and monitoring.

Mr. Ali is also a Mentor, Trainer, and Consultant for PAKW2E2 Pakistan Wireless Women Entrepreneurship and Empowerment (a US State Department and World Learning) WIRE Women in Renewable Energy (funded by the AUSAID), and Seed.org an initiative of the Prince Charles Trust to promote entrepreneurship amongst the young leaders of tomorrow.

Mr. Ali is also a certified trainer of the International Labor Organization's Start and Improve your Business Program. Mr. Ali is also Spearheading two programs named Pehchan and Nayi Soch at Bahria Innovation Center with the aim to promote Women Empowerment and Economic Development through Entrepreneurship.

SKY IS NOT THE LIMIT

Mr. Muhammad Naeem is the Founder of Digisthetics, DesignMe, and PEN Pakistan. While pursuing a bachelor's degree in Computer Engineering from Bahria University Islamabad, he developed skills in top-notch technologies. The knowledge has enabled him to work with renowned companies and then expand his network to business developers all around the world. Right now he is running two companies and a non-profit organization.



A results-driven digital agency specialized in Strategy, Brand Building & Web Design, and Digisthetics helps companies accelerate their online growth and get them where they need to be with eye-catching creatives leading their business in the right direction.

We leverage our marketing and technology knowledge, blending insight and creativity to help solve business initiatives. From designing software to multi-device compatibility to handling Enterprise platform integrations - we build solutions to meet the needs of your business today and in the future. If the technology isn't available on the market – in some cases, we create it.

Are you planning to surprise someone with a gift? Why choose something traditional when you can amaze them with something very creative and make only for them? DesignMe helps you with that, provides you with unique and attractive personalized gifts which can be used digitally as well.



Our Creative Designers are fully equipped to bring your visions to reality using dynamic designs. If you can think about it, we will do it or let us do everything for you.



PEN (Project Empower Nation) Pakistan

Our aim is to impart knowledge about various freelancing and other employment and entrepreneurial opportunities available internationally and locally. Some of our trained individuals are making more than a thousand dollars and it is also essential for the upcoming workforce to have the necessary knowledge and abilities to grab such opportunities. We Help people know their interest to master their skills in that particular field and then help them earn their first dollar.

BAHRIA GOT TALENT

Mr. Talha is a **Filmmaker** and a **Branding professional**, working in the field for the past 6 years. He has embarked on a journey of telling cultural and religious stories while preserving the essence of the ultimate truth. Mr. Talha believes that nations are built through the right representation of the identity and the right amount of preserving and branding that identity. He helps individuals and companies tame their spirit in a manner to adapt to the strength of originality. He loves to cherish the uniqueness of what our own things have to offer. He has worked with around **110+ companies/startups** in different capacities, helping them own their identity and represent it on-screen. He has Co-founded four ventures till the date, the flagship being SHOR Films, after which he names himself Shorwala. He has served, Government organizations, Multinationals, the private sector, development sector and has talked to over 10000 audiences live and on-stage. He has published **7 International research articles** on fields related to **Linguistics, Persuasion, and Media**.



MEET OUR **TEAM**



Patron
Commodore (Retd) Tahir Javed SI(M)
Director Marketing
Directorate of Marketing BUHO



Project Lead & Editor in Chief
Maham Malik
Publications Officer
Directorate of Marketing BUHO



Visuals & Images
Faizan Aslam
Professional Photographer
Directorate of Marketing BUHO



Creative Head & Art Director
Syeda Madiha Qamar
Graphic Designer
Directorate of Marketing BUHO

A Special Thanks To

Captain (R) Azhar Iqbal (PN)
Deputy Registrar (Academics)

For Reviewing BU Publication



KARACHI CAMPUS

13, National Stadium Road, Karachi
 BUKC ☎ +92 21 992 40002-6
 NCMPR & IPP ☎ +92 21 111 111 028



ISLAMABAD CAMPUS

Shangrilla Road, Sector E-8 &
 H-11 Islamabad
 ☎ +92 51 111 111 028

INSTITUTE OF PROFESSIONAL PSYCHOLOGY,

NATIONAL CENTRE FOR MARITIME POLICY RESEARCH

&

HEALTH SCIENCES KARACHI CAMPUS

Adjacent to PNS Shifa, DHA, Karachi
 ☎ +92 21 353 19491-9



LAHORE CAMPUS

47C, Civic Center, Johar Town,
 Lahore
 ☎ +92 42 99 233408-15