



Department of Computer Science
Agriculture University Peshawar
Cell#: +92-332-9075981

Email: ishaqafriidipk@gmail.com drmishaq@aup.edu.pk

Dr. MUHAMMAD ISHAQ

HEC APPROVED PHD SUPERVISOR

Objective

The purpose of life and measure of success as a Passionate researcher and professional academician is to bring positive improvements and changes in my assigned relevant area. Contribute and explore new horizons through selfless dedication and extra ordinary efforts in research and academics.

https://www.researchgate.net/profile/Muhammad_Ishaq26

<https://www.linkedin.com/in/dr-ishaq-afriidi/> ; <https://publons.com/dashboard/summary/>

Demonstrated and proven Skills & Abilities

Active Researcher and Supervisor in the field of Data Sciences, Bioinformatics, AI, Semantic Web/Ontology Engineering, Health Informatics, Computer Networks, Parallel Computing, advance databases, Computational Social Sciences, Multi criteria decision making (MCDM) and E or M-Learning.

Proven ability in OBE (Outcome based education) and transformation style of teaching at undergraduate and postgraduate levels in my relevant discipline/area since 2006, with Content and Curriculum Development and revision experience.

Accomplish Bachelor Degree accreditation from NCEAC, PEC and NCAAA (KSA).

Different industry and research based IT project management experience.

Consultant in Web/E-Commerce Development. Recent Programming skills in Python, Oracle (DBA & Developer) PHP MySQL and Network Simulation.

Native Languages: Pashtu, Urdu. Other Languages: Arabic(R/W/S/L). Fluency in English and Mandarin like natives (中文会话). HSK (汉语水平考试五级) certified. Chinese and English language teaching ability.

Experience

Agriculture University Peshawar, KPK Pakistan Assistant Professor, Computer Science

SINCE JANUARY 5, 2018

Work and Responsibilities: Teaching, Research, Supervision and QEC/QA.

University Of Sargodha, Punjab Pakistan Associate Professor, Computer Science

AUGUST 2016-JANUARY 2018

Work and Responsibilities: Teaching, Research, Academic administration and QEC/QA, Accreditation.

Qassim University, Kingdom of Saudi Arabia Assistant Professor, Health Informatics

9/2015 TO 8/2016

Work and Responsibilities: Teaching, Research And Academic Quality Assurance. Accreditation Of BS Health Informatics.

IQRA National University, Peshawar Pakistan, Assistant Professor, Computer Science,

11/2012 TO 9/2015

Work and Responsibilities: Teaching, Research, Supervision Of Research Scholars, Academic Administration. Departmental QEC/QA.

Virtual University, Lahore Pakistan. Lecturer Computer Science.

10/2006 TO 9/2008

Work and Responsibilities: Teaching, Research, E-Learning And Distance Based Education, Group/Team Lead.

Brains University/FATA Education Peshawar Pakistan. System Engineer/Lab In-charge,

9/2003 TO 10/2006

Work and Responsibilities: Teaching At Secondary (O And A Levels), Computer Network And Labs Management And Maintenance, Cisco Local Academy, CCNA Certification. Software Developer and System Analyst

Harbin Engineering University-China- Ph.D. Computer Science

Session 2008-2012

1st Division And A1 Grade: 573 Out 700(81.85%) In Ph.D. Course Work.

Thesis Title" Improved And Novel Computational Approaches Toward Sequence Alignment And Analysis In Bioinformatics".

Kohat University of Science And Technology-Pakistan- MSc.IT (Master Of Science In IT).

Session 2002-2005

1st Division And A Grade: 1738 Out 2400(72%) In Overall Semester Based Degree Program. The Main Goal Of This Degree Program Is To Gain Sufficient Hand On Experience On Industry Related It Tools And Technologies.

University Of Peshawar-Pakistan- BSc (Bachelor of Science).

Session 1999-2002

1st Division And B Grade: 333 Out 550(60%) In Overall Annual Based Degree Program. The Main Goal Of This Degree Program Is To Equip Students With Improved Knowledge and skills related to natural/basic sciences.

1.Titled :**Framework for the Development and analysis of ontologies in local natural language for more improved relevant semantics**

2. Titled: **Development of a Robust Framework for the Next Generation Computational Sequence Analysis and Alignment**

3. Titled: **Comprehensive improvements in Agri-Informatics Semantics**

1. M Ishaq, Asfandyar Khan, Majid Khan, Muhammad Imran. **Current Trends and Ongoing Progress in the Computational Alignment of Biological Sequences**. IEEE Access Transaction, Vol 7 pp 68380 – 68391, 10 May 2019.

2. Javed Iqbal Bangash, Asfandyar Khan, Muhammad Ishaq, Muhammad Imran. **A Dynamic Swift Association Scheme For Wireless Body Area Networks**, Transactions On Emerging Telecommunications Technologies
<https://doi.org/10.1002/ett.3724>.

3. Abdullah Khan, Junaid Bukhari, Javed Iqbal Bangash, Asfandyar Khan, Muhammad Imran, Muhammad Asim, Muhammad Ishaq Arshad Khan. **Optimizing Connection Weights of Functional Link Neural Network Using APSO Algorithm for Medical Data Classification**, Journal of King Saud University - Computer and Information Sciences.
<https://doi.org/10.1016/j.jksuci.2020.10.018>.

4. Muhammad Ishaq, Akhtar Hussain, Javed Iqbal Bangash, Abdullah Khan, Muhammad Asim, **Web Accessibility Evaluation of Open Educational Learning Contents for Individuals with Learning Disabilities**, Submitted to Journal of Learning Disabilities.

5. MI Afridi. **Novel Hybrid Genetic Algorithm for Progressive Multiple Sequence Alignment**, International Journal of Bioinformatics research and applications (IJBRA), Vol.9, No.6, pp.614 – 624, 2013.

6. Muhammad Ishaq Afridi, Gui Sheng Yin. **Structure Based Protein Multiple Sequence Alignment Algorithm on a Parallel System**. International Journal of Machine Learning and Computing (IJMLC), Vol. 2, No. 1, February 2012.

7. Muhammad Ishaq Afridi. **Cognition in a Cognitive Routing System for Mobile Ad-hoc Network through Learning Automata and Neural Network**, Journal of Applied mechanics and materials, Volume 421.694, Pages 694-700, September 2013.

8. Muhammad Ishaq, Arshad Khan, Javed Iqbal Bangash, **Optimal Dynamic Programming based task scheduling for Parallel Multiple Sequence Alignment**. Advances in Bioinformatics (ISI indexed)

9. Muhammad Ishaq, Abdullah, Muhammad Asim, **Comparative role and features analysis of relational and linked databases..** Under review.

10. Muhammad Ishaq, Arshad Khan, Javed Iqbal Bangash, Abdullah, Muhammad Asim, **Framework for the development and analysis of Natural language ontologies**. Under review.

Conference Proceeding:

Attended Online Conference on the Frontiers of Swarm Robot Research. Beijing University November 7-8 2020.

MI Afridi. Selection and ranking of optimal routes through genetic algorithm in MANET, IEEE Computer Society Fifth International Symposium on Computational Intelligence and Design (ISCID), Hangzhou China, pages 507-510, 2012. (IEEE, EI)

MI Afridi, Gui Sheng Yin. Novel Gene finding through BLAST search. Phylogenetic analysis through MEGA, 2011 International Conference on Computer Science and Network Technology (ICCSNT), Page(s): 115 – 119, Harbin China 2011. (IEEE, EI).

Muhammad Ishaq Afridi, Yin Gui Sheng. Nucleic Acid and Protein Sequence alignment Methods and algorithms. Current progress and Next Generation sequencing or future trends. 5th International Conference on Advanced Computer Theory and Engineering, (ICACTE 2012), Chapter 43,pages 10, Cape Town South Africa, September 2012.(ASME,EI)

Muhammad Ishaq Afridi, Yin Gui Sheng. Parallelization of Structure based Protein Multiple Sequence alignment algorithm. 5th International Conference on Advanced Computer Theory and Engineering, (ICACTE 2012), Chapter 36,pages 6, Cape Town South Africa, September 2012.(ASME,EI).

Father Name: Nasrullah Khan

Gender: Male

NIC No: 21201-1535272-5

Nationality: Pakistani

Date of birth: 27/04/1980

Passport Number: BK 1842722

FBR NTN No: 4123863-0

Domicile/Home city: Bara District Khyber KPK

Full Ph.D. Scholarship: from HEC Pakistan and CSC China for the Session 2008-12.

Post Doc full Scholarship invitations:

1.From Assistant Professor Yeon Soo Lee, PhD, Dept. of Biomedical Engineering, College of Medical Science, Catholic University of Daegu, REP. OF KOREA, 712-702. Area of proposed post doc

Research: **Anti-Malaria bioinformatics study that belongs to 8 UN millennium development goals (MDGs).**

2. TWAS-UPM Postdoctoral fellowship award from Prof.Dr. Lilly Suriani in the area of

“**Next Generation Sequence Alignment of enormous amount of biological sequencing data in Hadoop**” University of Putra Malaysia.

Plenary/Key Note Speeches:

1. Framework for Natural Language (Urdu based) Ontology (NLO), Plenary/keynote at **3rd National Conference of Computer Science and Information Technology (NCCSIT) 2019** At Lahore Garrison University Pakistan. April 24 2019.

2.**2017EMN Meeting on Biomedical Engineering**, The Hong Kong Polytechnic University.

3.IEEE ICCSNT international conference at Harbin Normal University from December24-26 2011.
<http://www.iccsnt.org/files/Plenaryspeeches.pdfz>

4. **ProQuest Ebook Central Advanced Training**, on September 30, 2020, in partnership with Higher Education Commission.

Chair international Conference sessions:

1.IEEE ICCSIT 2011conference that was held in June 2011 and at

2.IEEE ICCSNT 2011 in December 2011.

3. **TECHNICAL PROGRAM COMMITTEE MEMBER AT ICEPECA 2020 AT XIAMEN CHINA.**

Reviewer: Oxford Journal of Bioinformatics, Elsevier Journal of Computational Biology and Chemistry Peer review committee of ASME ICCTD 2011(www.icctd.org). Springer Journal of Ambient Intelligence and Humanized Computing. Journal of IEEE Access

Membership: American Chemical society(ACS), IEEE Membership ID: 91243337, Thompson and Reuter Researcher ID: O-5268-2015, ORCID ID: orcid.org/0000-0003-1963-5041