

## ►abeera ilyas

E-mail: [abeerailyas@uop.edu.pk](mailto:abeerailyas@uop.edu.pk)

Website: <https://www.linkedin.com/in/abeera-ilyas-95a73886/>

### Education

#### **Doctor of Philosophy, Ph.D (Computer Science), University of Peshawar (2016-2017)**

- Study emphasis: Solution for enhancing quality of service for health monitoring data in fog based IoT environment
- Thesis: "Improved real-time transmission latency in a fog assisted IoT health monitoring system"
- Advisor: Prof. Dr. Saeed Mahfooz
- Final grade: 3.9/4.0

#### **Masters of Science, M.S (Networking), University of Peshawar (2008-2009)**

- Study emphasis: Solution for a handover delay for mobile stations in a Macro and femtocell environment in WiMAX networks
- Master's Thesis: "Algorithm For Providing An Improved MacroFemto Handover Decision In Mobile WiMAX"
- Advisor: Prof. Dr. Saeed Mahfooz
- Final grade: 3.3/4.0

#### **Bachelors of Science, B.S (Computer Science), University of Peshawar (2004-2007)**

- Study emphasis: Computer Networks, Databases, Software Engineering
- Thesis Title: " Computerized hotel management system"
- Final grade: 3.7/4.0

### Experience

#### **Assistant Professor, College of Home Economics, University of Peshawar (2011 –to date)**

##### **Job Responsibilities**

- Teaching undergraduate and graduate courses in Computer Science.
- Conducting research in their area of expertise.
- Participating in service activities for the department, college, and university.
- Administering and managing Computer Science resource labs.
- Designing new courses related to Computer Studies.
- Previously have served as a lecturer from 2008-2011.

#### **Lecturer, Jinnah College for Women, University of Peshawar (2008 –2011)**

#### Job Responsibilities

- Teaching undergraduate and graduate courses in Computer Science.
- Served as a permanent member of disciplinary committee in the college.

#### Internships

##### The Bank of Khyber

- Voluntarily worked at the IT department of the bank dealing with distributed databases and network troubleshooting in 2006.

##### First Women Bank

- Voluntarily served at various entry level positions (cash counter, IT and trouble shooting team) in the bank in 2007.

#### Certifications

- ▶ IBM data science certified through coursera.org
- ▶ Google Digital Marketing certification in progress at coursera.org

#### Project

A data science project was done to identify the ideal location for opening up an Asian restaurant in the area of Queens borough-NY. For the said project various tools and methods were used to filter out the best possible location (in terms of revenue) using Python. This project was submitted as the final assignment for the IBM data science specialization course.

#### Subjects of Interest

- ▶ Internet of things (IoT)
- ▶ Fog Computing
- ▶ Wireless Networks
- ▶ Digital marketing
- ▶ Machine learning
- ▶ 5G Networks
- ▶ MATLAB
- ▶ C/C++
- ▶ Python
- ▶ Digital graphics

Specialization: Networks

#### Publications

##### Conference Paper:

- ▶ Saeed Mahfooz, Abeera Ilyas. "Algorithm for an improved MacroFemto handover decision in mobile WiMAX." In proceedings of 15th Annual postgraduate symposium on the convergence of telecommunications, networking and broadcasting, 2014. ISBN: 978-1-902560-27-4 © 2014 PGNet

##### Journal Paper:

- ▶ Abeera Ilyas, Madeeha Aman, Nasir Saeed," Delay analysis of an improved WiMAX MacroFemto Handover Technique and Cell Selection Algorithm", Wireless personal Communications Springer, Vol

85, pp 2157-2168, Dec 2015, DOI: 10.1007/s11277-0152897-x

- Mubarak Mohammed Al-Ezzi Sufyan, Waheed Ur Rehman, Tabinda Salam, Qazi Ejaz Ali, Abeera Ilyas & Fahmi Quradaa,” Duplication elimination in cache-uplink transmission over B5G small cell network”, Journal Wireless Com Network, Springer, 2021, DOI: <https://doi.org/10.1186/s13638-021-02059-2>
- Abeera Ilyas, Mohammed Naif Alatawi, Yasir Hamid, Saeed Mahfooz, Islam Zada, Neelam Gohar & Mohd Asif Shah, “Software architecture for pervasive critical health monitoring system using fog computing”. Journal of Cloud Computing vol 11, no. 84 (2022). <https://doi.org/10.1186/s13677-022-00371-w>
- Abeera Ilyas, Saeed Mahfooz, Zahid Mehmood, Gauher Ali and Muhammad ElAffendi,” Two-way approach for improved real-time transmission in fog-iot-based health monitoring system for critical patients”, Computer Systems Science and Engineering, TSP, vol 46, no.3, pp. 3815–3829, (2023). <https://doi.org/10.32604/csse.2023.036316>

### Administrative Experience

- Admission Committee (Served as a member in admission committee of College of Home Economics , UOP for F.Sc/F.A Program)
- Upgradation of Department of Computer Studies, CHE ( supervised the renovation and upgradation of computer labs in the college)
- Funfair 2014 ( member of the organizing committee of the mega project for the funfair 2014, CHE)
- Staff Proctor (Member of the proctorial board and discipline committee of CHE since 2012)
- Online Media Coordinator (admin of the official social media pages of College of Home Economics, Uop)
- Coordinator of the HSSC program at the College of Home Economics in 2023-24.

### Career Development

- Participated in a training on “Communication Skills” at CHRCD, UOP from 11-13 March 2015.
- Attended lectures on “Research methodology, Accounting and auditing” under the in-service certified training program (2014-15) organized by Centre of Human Resource and Career Development, UOP in December.
- Participant at a one week workshop on topic “logical and analytical thinking” arranged by CHRCD, UoP dated 5th-9th May 2014.
- Attended one week workshop on topic “psychology of learning and education” organized by Centre of Human Resource and Career Development, UOP in April.
- Joined workshop from 3rd -5th April, 2014 arranged by Centre of Human Resource and Career Development, UOP on the topic of “Teaching Practicum” at CHRCD, University of Peshawar.
- Participated in the Disaster Management Exhibition held on 20th November 2013 arranged by the Centre for Disaster Preparedness and Management Peshawar, UOP.
- Attended workshop “The changing role of social media in Muslim countries- Reviewing curricular trends of communication studies in Pakistan” arranged by Young Women writer’s forum Pakistan on 20th-21st March, 2013.

### Additional Experience

- Worked as a freelance content writer for various blogs, websites and newsgroups during student years. ([www.freelancer.com](http://www.freelancer.com))
- Worked as a consultant for Oriflame Cosmetics, Pakistan from 2012-15.