

# Dr. Muhammad Qasim Khan

Department of Computer Science Comsats Institute of Information Technology Attock

**Date of Birth:** 11 March 1981

**Passport Number:** MJ4106382

**Nationality:** Pakistani

**Mobile No:** 0092-3339840799

**E-mail:** [mqasimkhan21@hotmail.com](mailto:mqasimkhan21@hotmail.com) [dr.qasim@ciit-attock.edu.pk](mailto:dr.qasim@ciit-attock.edu.pk)

## Teaching and Work Experience:

- Assistant Professor at Department of Computer Science CIIT Attock Pakistan from 31 October 2012 till date.
- As teacher assistant at the Department Telematics NTNU Norway with **Prof. Lill Kristiansen.**
  - January 2011 to May 2011
  - January 2012 till date.
- Assistant in the project Networklab (NetLab) department of Telematics NTNU Norway <http://www.item.ntnu.no/department/labs/netlab/start>
- As a Computer Science Teacher in Pakistan Education Center (P.E.C) Doha Qatar. Feb 2007 to May 2008.
- As a Lecturer in PSI institute Peshawar, Pakistan from 9<sup>th</sup> Sept 2004 to 14<sup>th</sup> Oct 2006.
- As visiting lecturer in Mardan Institute of I.T, Pakistan from 20 Sept 05 to 20 Dec 2005.
- As a Lecturer in Brains Post Graduate College Peshawar Pakistan from 10<sup>th</sup> Dec 2003 to 5<sup>th</sup> Sept 2004.

## Education

- PhD at Norwegian University of Science and Technology Norway from (August 2008 to August 2012).

**Thesis Title:** **Optimizing Handovers in Wireless Networks utilizing extended MIIS facilities.**

Supervisors: Prof. Steinar Hidle Andresen and Co-Supervisor: Prof. Poul Heegard

### **Brief Synopsis of Research:**

Handover efficiency in wireless and mobile communication networks is an important factor in providing Quality of Service (QoS) guarantees for real time applications. Due to the fact that internet does not support mobility by design; protocols with additional functionality are needed. These protocols must not only guarantee continuous communication but must also ensure delay sensitive applications do not experience communications breaks.

**Research Interests:**

My current research is on Handover Efficiency and Mobility Management in Packet switched networks.

- 2005 – 2007 MS-IT from University of Peshawar Pakistan.
- 2002 – 2003 MSc in Computer Science from University of Peshawar Pakistan.
- 1999 – 2001 BSc Computer Science from University of Peshawar Pakistan.
- 1997 – 1999 F .Sc Pre Engineering from Federal Board Islamabad Pakistan.
- 1995 – 1997 SSC from Board of Intermediate and Secondary Education Peshawar.

## Conference Publications and Presentations:

1. Muhammad Qasim Khan, Steinar Hidle Andresen, "A Semi and Fully Distributed Handover Algorithm for Heterogeneous Networks using MIIS". In proceedings of 17th IEEE Symposium on Computers and Communication (ISCC12) Cappadocia Turkey 1 - 4 July 2012. DOI: 10.1109/ISCC.2012.6249283.
2. Muhammad Qasim Khan, Steinar Hidle Andresen , "Zero Scanning Time for 802.11 Networks by Using Media Independent Information Server (MIIS)". In proceedings of 26th IEEE International Conference on Advanced Information Networking and Applications (AINA-2012). IEEE Computer Society 2012 ISBN 978-0-7695-4651-3. pp. 467-473. DOI: 10.1109/AINA.2012.100.
3. Muhammad Qasim Khan, Steinar Hidle Andresen, "PoA Selection in 802.11 Networks using Media Independent Information Server (MIIS)".In proceedings of the 25th IEEE International Conference on Advanced Information Networking and Applications Workshops (WAINA 2012) Fukuoka Japan, March 26 - 29, 2012. IEEE Computer Society 2011 ISBN 978-0-7695-4652-0. pp. 454-459. DOI: 10.1109/WAINA.2012.142.
4. Muhammad Qasim Khan, Steinar Andresen Hidle, "The Implications of Zero Scanning Time on MIPv6 Handover Delays by Using Media Independent Information Server (MIIS)", Proceedings of the 17th Asia-Pacific Conference on Communications (APCC 2011). : IEEE 2011 ISBN 978-1-4577-0388-1.
5. Muhammad Qasim Khan, Steinar Andresen Hidle, "An Intelligent Scan Mechanism For 802.11 Networks by Using Media Independent Information Server (MIIS)" accepted in FINA workshop collocated with 25th IEEE International Conference on Advanced Information Networking and Applications (AINA-2011) Biopolis, Singapore, March 22 - 25, 2011.
6. Muhammad Qasim Khan, Steinar Andresen Hidle, Kashif Nizam Khan. "Pros and Cons of Route Optimization Schemes for Network Mobility (NEMO) and Their Effects on Handovers". International Conference on Frontiers of Information Technology (FIT) Islamabad Pakistan Dec 2010. ACM Press ISBN 978-1-4503-0342-2.
7. Muhammad Qasim Khan, Steinar Andresen Hidle "Application of Media Independent Handover (MIH) for Intra Technology Handover". Mosharaka International Conference on Communications, Networking and Information Technology Dec 2009 Amman Jordan.
8. Abdul Muhamin Naeem, Muhammad Inam ul Haq, Irshad Ahmad, Muhammad Islam,

## Journals Publications

1. Muhammad Qasim Khan, Steinar Andresen Hidle, "Pros and Cons of Route Optimization Schemes for Network Mobility (NEMO) and Their Implications on Handovers". In Transactions on Electrical and Electronic Engineering. IEEJ, Vol.7/No.6 (November 2012 Issue). DOI: 10.1002/tee.21781

## Reviewed Conferences/Journals

- Globecom 2011
- IEEE Communication Letters 2012.
- IEICE Transactions 2012
- ISWTA 2012

## Supervised student project:

- Issues in Network Mobility (NEMO) fall semester 2009.

## Training Workshops Attended:

- Scientific Writing Workshop NTNU February 2012.
- Workshop on CDMA 1X RC1 & RC2 delivered by Dr Syed Ismail Shah (Program Director PakCDMA Forum).

## Programming Experience:

- Simulation in ns2.
- Computerization of Library of Informatics Institute of I.T Peshawar.

## Languages:

- Fluent in English, Pashto and Urdu

## Hobbies and Interests:

- Travel, Music, Sports, Movies

## References:

**Prof. Steinar Hidle Andresen (PhD Supervisor)**

Professor, Department of Telematics.  
Norwegian University of Science and Technology  
N-7491 NTNU Trondheim Norway.  
E-mail: steinara@item.ntnu.no ;  
phone: +47-73-59-27-41  
Cell: +47-92-02-48-58

**Prof. Poul Heegard (PhD Co-Supervisor)**

Professor and Head of department, Department of Telematics.  
Norwegian University of Science and Technology  
N-7491 NTNU Trondheim Norway.  
e-mail: poul.heegaard@item.ntnu.no ;  
phone: +47-73-59-43-21  
Cell: +47-99-28-68-58

**Prof. Lill Kristiansen**

Professor, Department of Telematics.,  
Norwegian University of Science and Technology  
N-7491 NTNU Trondheim Norway.  
e-mail: lillk@item.ntnu.no ;  
Phone: +47-73-59-14-86  
Cell: +47-97-72-72-27