

CONTACT INFORMATION 5203 Ferdaws Court,
King Fahd University of Petroleum and Minerals (KFUPM)
Dhahran 31261, Saudi Arabia +966 (50) 2074421 (*voice*)
aqkara@gmail.com(*email*)

EDUCATION **George Mason University**, Fairfax, Virginia USA
Ph.D. Information Technology, January 2012.
Advisor: Karla L. Hoffman
Dissertation: A Congestion Pricing Model to handle “Day of Operations”
Airport Capacity Reductions due to Inclement Weather

University of Saarland, Saarbrücken, Germany
M.S. Computer Science, 2004.
Advisors: Jörg Siekmann and Klaus P. Jantke
Thesis: Inductive Learning Approaches in Wrapper Induction

Mohammad Ali Jinnah University, Karachi, Pakistan
B.S. Computer Science, 2002.
Advisor: Abbas K. Zaidi
Thesis: Project Management using Temporal Logic

GRANTS,
FELLOWSHIPS
& AWARDS

- Junior Faculty & Internal Research Grant at King Fahd University of Petroleum and Minerals (KFUPM) (2014–2015).
- Best paper award at International Conference on Research in Air Transportation (ICRAT) 2010.
- Research Assistantship at GMU (2006 –2011).
- International Max Planck Research School (IMPRS) Fellowship at University of Saarland in Germany (2002 – 2003).
- Merit scholarships at Mohammad Ali Jinnah University (1999 – 2002).

RESEARCH
INTEREST AREAS My research interest includes solving problems generated from diverse practical applications such as scheduling, scarce resource management, transportation, routing etc. using techniques from Operations Research (OR), Artificial Intelligence (AI) and/or Constraint Programming (CP) paradigms.

TEACHING
EXPERIENCE **King Fahd University of Petroleum and Minerals**, Dhahran, Saudi Arabia
Assistant Professor, Systems Engineering Dept. 2012–present

Effat University, Jeddah, Saudi Arabia
Lecturer, Computer Science Dept. 2011–2012

George Mason University, Fairfax, Virginia
Teaching Assistant, Systems Engineering Dept. Fall 2007

Mohammad Ali Jinnah University, Karachi, Pakistan
Teaching Assistant, Computer Science Dept. 2001–2002

RESEARCH
EXPERIENCE

George Mason University, Fairfax, Virginia

Graduate Research Assistant

- **Center for Air Transportation Systems Research** (Fall 2008- Spring 2011)
- **Systems Architecture Laboratory** (Fall 2006- Summer 2008)

University of Saarland, Saarbrücken, Germany

Research Assistant

- **Institute for Computer Architecture and Parallel Computing** (Fall 2005- Spring 2006)

Graduate Research Assistant

- **Institute for Computer Architecture and Parallel Computing** (Fall 2004- Summer 2005)
- **Siekman's Work Group (Multi Agents Group)** (Spring 2004 - Summer 2004)
- **Max Planck Institute Programming Logics Group** (Spring 2004 - Summer 2004)

PUBLICATIONS

Journal Papers

- **"Capillary Rise of Magnetohydrodynamic Fluid into Deformable Porous Material"**
Javed I. Siddique, Abdul Qadar Kara
Submitted to Journal of Applied Fluid Mechanics, September 2015
- **"Estimating Domestic U.S. Airline Cost of Delay based on European Model"**
John Ferguson, Abdul Qadar Kara, Karla Hoffman, Lance Sherry
Transportation Research Part C: Emerging Technologies, Volume 33, August 2013

Conference Papers

- **"Analysis of Congestion Pricing Model to Handle "Day of Operations" Airport Capacity Reduction"**
Abdul Qadar Kara
34th Digital Avionics Systems Conference (DASC), September 2015
- **"Sensitivity Analysis to the Cost of Delay Model for NextGen Benefits Analysis"**
Abdul Qadar Kara, John Ferguson, Karla Hoffman, Lance Sherry
Integrated Communications Navigation and Surveillance (ICNS) Conference, 2010
- **"Estimating Domestic U.S. Airline Cost of Delay based on European Model"**
Abdul Qadar Kara, John Ferguson, Karla Hoffman, Lance Sherry
4th International Conference on Research in Air Transportation (ICRAT), 2010
- **"Airline Response to Changing Economics and Policy"**
John Ferguson, Karla Hoffman, Lance Sherry, George Donohue, Abdul Qadar Kara, Rosa Oseguera-Lohr.
Integrated Communications Navigation and Surveillance (ICNS) Conference, 2010
- **"Effects of Fuel Prices on Air Transportation Market Average Fares and Passenger Demand"**
John Ferguson, Karla Hoffman, Abdul Qadar Kara, Lance Sherry
9th AIAA Aviation Technology, Integration, and Operations Conference (ATIO) and Aircraft Noise and Emissions Reduction Symposium (ANERS), 2009
- **"Effects of Fuel Prices on Air Transportation Performance at New York and San Francisco Airports"**
John Ferguson, Karla Hoffman, Lance Sherry, Abdul Qadar Kara
Integrated Communications Navigation and Surveillance (ICNS) Conference, 2009
- **"Effects of Fuel Prices and Slot Controls on Air Transportation Performance at New York Airports"**
John Ferguson, Karla Hoffman, Lance Sherry, Abdul Qadar Kara, Guillermo Calderon
Eighth USA/Europe Air Traffic Management Research and Development Seminar (ATM), 2009

Theses & Dissertations

- *A Congestion Pricing Model to handle “Day of Operations” Airport Capacity Reductions due to Inclement Weather*, Ph.D. Dissertation, George Mason University, July 2011.
- *Inductive Learning Approaches in Wrapper Induction*, Master Thesis, University of Saarland, May 2004.

PRESENTATIONS

- **“Analysis of Congestion Pricing Model to Handle “Day of Operations Airport Capacity Reduction”**
The Institute for Operations Research and the Management Sciences (INFORMS) Annual Meeting 2014, November 2014
- **“A Congestion Pricing Model to handle “Day of Operations” Airport Capacity Reductions due to Inclement Weather”**
The Institute for Operations Research and the Management Sciences (INFORMS) Computing Society (ICS2011), January 2011

SOFTWARE SKILLS	Programming Languages	C, C++, C#, Java, Visual Basic, Lisp, OCaml, Assembly Language (for 80x86 and 80x85 series)
	Theorem Provers	Isabelle, PVS, Coq
	Optimization Solvers	CPLEX, Gurobi
	Operating Systems	Solaris, Linux, Unix SvR4, Windows 95/98/NT4/2000/XP/7