

# MUNEEB ALI

35 Olden Street  
Princeton, NJ 08540-5233

Email: [muneeb@princeton.edu](mailto:muneeb@princeton.edu)  
Web: <http://muneeb.org>

## RESEARCH INTERESTS

---

Large-scale Networked Systems, Wireless and Sensor Networks, and ICT in Developing Regions.

## EDUCATION

---

PRINCETON UNIVERSITY <b>PhD</b> in Computer Science ( <b>Expected 2013</b> )	Princeton, NJ <i>Sep'2008 – Present</i>
LAHORE UNIVERSITY OF MANAGEMENT SCIENCES (LUMS), <b>BSc (Honours)</b> in Computer Science, with minor in Mathematics	Lahore, Pakistan <i>Aug'1999 – May'2003</i>

## HONORS & AWARDS

---

- Awarded J. William Fulbright Fellowship for PhD (Declined) 2006
- Travel Award from Dagstuhl Summer School on Wireless Sensor Networks, Germany 2005
- Travel Award from 2nd IEEE CNSR Conference, Fredericton, Canada 2004
- President of the ACM LUMS Student Chapter 2001–2002
- ACM Award for Outstanding Student Chapter Website 2000–2001

## RESEARCH EXPERIENCE

---

- **Princeton University**, Princeton, NJ  
**Grad. Research Assistant**, Advisor: Michael Freedman, *Sep'2008 – Present*
- **Delft University of Technology (TU Delft)**, Delft, The Netherlands  
**Research Staff**, Advisor: Koen Langendoen, *Apr'2006 – Aug'2008*
- **Stanford University**, Stanford, CA  
**Visiting Researcher**, Advisor: Philip Levis, *Summer 2007*
- **Swedish Institute of Computer Science (SICS)**, Kista, Sweden  
**Visiting Researcher**, Advisor: Thiemo Voigt, *Fall 2005*

## WORK EXPERIENCE

---

- **Evolutions Inc.**, Lahore, Pakistan  
**Co-Founder** and Manager Research & Development, *2003 – 2005*

## PUBLICATIONS

---

### Conference Papers

1. Adam Dunkels, Oliver Schmidt, Thiemo Voigt, and **Muneeb Ali**, “Protothreads: Simplifying Event-Driven Programming of Memory-Constrained Embedded Systems”, In *Proceedings of the 4th ACM Conference on Embedded Networked Sensor Systems (SenSys'06)*, pp. 29-42, Boulder, CO, November 2006.

2. **Muneeb Ali** and Zartash Uzmi, "CSN: A Network Protocol for Serving Dynamic Queries in Large-Scale Wireless Sensor Networks", In *Proceedings of the 2nd Annual Conference on Communication Networks and Services Research (CNSR'04)*, pp. 165-174, Fredericton, N.B, Canada, May 2004.

### Workshop Papers

3. **Muneeb Ali** and Koen Langendoen, "TinyPC: Enabling Low-Cost Internet Access in Developing Regions", In *ACM SIGCOMM Workshop on Networked Systems for Developing Regions (NSDR'07)*, pp. 177-182, Kyoto, Japan, August 2007.
4. **Muneeb Ali** and Koen Langendoen, "A Case for Peer-to-Peer Network Overlays in Sensor Networks", In *Proceedings of the International Workshop on Wireless Sensor Network Architecture (WWSNA'07)*, pp. 55-60, Cambridge, MA, USA, April 2007.
5. **Muneeb Ali**, Thiemo Voigt, and Zartash Uzmi, "Mobility Management in Sensor Networks", In *Workshops Proceedings of 2nd IEEE Conference on Distributed Computing in Sensor Systems (DCOSS'06)*, pp. 131-140, San Francisco, CA, June 2006.
6. **Muneeb Ali**, Tashfeen Suleman, and Zartash Uzmi, "MMAC: A Mobility-Adaptive, Collision-Free MAC Protocol for Wireless Sensor Networks", In *Workshops Proceedings of the 24th IEEE Performance, Computing, and Communications Conference (IPCCC'05)*, pp. 401-407, Phoenix, AZ, April 2005.
7. **Muneeb Ali** and Zartash Uzmi, "An Energy-Efficient Node Address Naming Scheme for Wireless Sensor Networks", In *Proceedings of the IEEE International Networking and Communications Conference (INCC'04)*, pp. 25-30, June 2004.

### Journal Papers

8. **Muneeb Ali** and Zartash Uzmi, "Medium Access Control with Mobility-Adaptive Mechanisms for Wireless Sensor Networks", In *International Journal of Sensor Networks*, vol. 1, no. 3, pp. 134-142, 2006.

### Editorials

9. **Muneeb Ali**, Umar Saif, Adam Dunkels, Thiemo Voigt, Kay Römer, Koen Langendoen, Joseph Polastre, and Zartash Uzmi, "Medium Access Control Issues in Sensor Networks", In *ACM SIGCOMM Computer Communication Review (CCR)*, vol. 36, no. 2, pp. 33-36, April 2006.

## TEACHING EXPERIENCE

---

- Guest Lecturer: ICTP *School on Wireless Networking for Development*, Trieste, Italy *Feb'2008*
- Co-instructor: IN4181 *Wireless Sensor Networks*, Delft, Netherlands *Spring 2007*
- Designed the course: CS-579 *Wireless Sensor Networks*, LUMS, Lahore *Winter 2004*  
<http://suraj.lums.edu.pk/~muneeb/course>

## PROFESSIONAL ACTIVITIES

---

### Technical Program Committees

- WCSN 2008, Allahabad, India *Dec'2008*
- WSAN 2008, Ottawa, Canada *July'2008*
- ACM NSDR'08 (with ACM SIGCOMM'08), Seattle, WA - **Program Co-chair** *Aug'2008*
- WEWSN 2008 (with DCOSS'08), Santorini Island, Greece *Jun'2008*
- ACM RealWSN'08 (with ACM EuroSys'08), Glasgow, Scotland *Apr'2008*
- WCSN 2007, Allahabad, India *Dec'2007*
- WSAN 2007, Albacete, Spain *Sep'2007*
- ACM NSDR'07 (with ACM SIGCOMM'07), Koyoto, Japan - **Publicity Chair** *Aug'2007*
- WCSN 2006, Allahabad, India *Dec'2006*
- ACM RealWSN'06 (with ACM MobiSys'06), Uppsala, Sweden *Jun'2006*

## External Reviews

- **2008:** TOSN, INFOCOM, IPSN/SPOTS, and ICDCS.
- **2007:** TOSN, EWSN, MobiQuitous, INSS, ARCS, and ISWPC.
- **2006:** SECON, EWSN, and NCC.

## TALKS

---

### Conference Talks

1. “Low-Cost Internet via TinyPC”, at ACM NSDR’07, Kyoto, Japan *Aug 27th 2007*
2. “P2P meets Sensornets”, at WWSNA’07, Cambridge, MA *Apr 24th 2007*
3. “4-Bit Addressing in Sensor Networks”, at IEEE INCC’04, Lahore, PK *Jun 11th 2004*
4. “Chord for Sensor Networks”, at CNSR’04, Fredericton, N.B, Canada *May 20th 2004*

### Other Talks

5. “A Brief History of Sensor Networks”, at Princeton University, NJ *Dec 09th 2008*
6. “Routing in Low Power & Lossy Networks”, at Stanford University, CA *Aug 16th 2007*
7. “A Case for P2P Overlays in Sensornets”, at 14th GNARP, Garderen, The Netherlands *Mar 15th 2007*
8. “Protothreads: Simplifying Embedded Programming”, at FIT’05, Islamabad, PK *Dec 29th 2005*
9. “Towards a Sensornet Architecture”, at SICS, Kista, Sweden *Nov 21st 2005*
10. “MMAC: Mobility-Adaptive MAC”, at Dagstuhl Summer School on WSN, Germany *Aug 30th 2005*

## LANGUAGES

---

Proficient in English and Urdu. Some knowledge of Dutch and Swedish.

## REFERENCES

---

Available upon request.