

510 HIGHLAND AVE, EAST LANSING, MI 48823
PHONE: (517) 282 0382 E-MAIL: KHAKPOUR@CSE.MSU.EDU
[HTTP://WWW.CSE.MSU.EDU/~KHAKPOUR](http://www.cse.msu.edu/~khakpour)

Amir Reza Khakpour

EDUCATION:

- **Ph.D, Computer Science and Engineering, Michigan State University**, East Lansing, MI, USA.
Second year student. Working in the SENS lab.
Advisor: Dr. Alex X. Liu
- **M.S., Computer and Communication Networks (CCN), Telecom SudParis¹**, Evry, France.
High Honors (Equivalent GPA²: A+)
Graduation July 2007. Major: Wireless and Mobile Networks.
Thesis: *Design and Prototyping of an Event-based Middleware for MANETs*
- **B.S., Electrical Engineering, University of Tehran**, Tehran, Iran.
Graduated July 2005. Major: Telecommunications (Equivalent GPA: B)
Thesis: *The Analysis of Different AAA Methods in Access Layer of Univ. of Tehran Enterprise Network.*

HONORS AND AWARDS AND ACTIVITIES:

- Best Paper Award in Mobilware 2009.
- National prize of 1st International Kharazmi Youth Festival, December 1999.
For designing and building “Braille Scanning System” (BSS)- Braille line scanner and translator into text
- Ranked 1st among all graduate students in Telecom SudParis.
- Dean awarded for Implementation of Wireless HotSpot for ECE Dept. of Univ. of Tehran.
- Co-founder and Vice President of IEEE Student Branch in INT.
- Member of Table-Tennis Team of Faculty of Engineering, University of Tehran
- IEEE Student Member.

RESEARCH INTEREST:

- **Network Management and Security:** Large-scale Network Monitoring, Security and Configurations, Firewalls, Operating System Security, Cryptography, Anomaly Detection
- **Wireless Networking:** Mobile Ad Hoc Networks, Sensor Networks, RFID, and Mobile Middleware

PROFESSIONAL AND RESEARCH EXPERIENCES:

- September 2009- present Michigan State University, CSE Dept. East Lansing, MI
Research Assistant: Conducting research on large-scale networking and security problems, and working on my PhD thesis
- September 2007- May 2009 Michigan State University, CSE Dept. East Lansing, MI
Teaching Assistant: Teaching assistant of the undergraduate course CSE410-Operating Systems and CSE422-Computer Networks
- January 2007- August 2007 Telecom ParisTech (ENST) Paris, France
Research Intern : Working on prototyping and implementation of an event-based middleware for mobile ad hoc networks (MSc Thesis)
- October 2006 – December 2006 Telecom SudParis Evry, France
Research Assistant: Doing research mostly conducting to security and security issues in ad hoc networks, working on WATCHMAN Project.
- June 2005 – January 2006 Iran Research and Academic Network (<http://www.iranet.ir>) Tehran, Iran

¹ Former Institut National des Télécommunications (GET/INT)

² Based on WES (World Education Service) International Grade Conversion Guide For Higher Educations (<http://www.wes.org/gradeconversionguide/>)

Administrator/Researcher: Participating in security and networking research projects mainly conducting to wireless networking

- September 2004 – July 2005 University of Tehran, Informatics Center Tehran, Iran
Networking Researcher: Working on analysis of different AAA methods which would be applied on access layer of Univ. of Tehran enterprise network based on different current applications and topologies
- August 2001– July 2005 University of Tehran, ECE Dept. Tehran, Iran
Network and Server Administrator: Network and server maintenance besides to developing and implementing new services for ECE dept.
- May 2002 – April 2005 ParsOnline Corp. (<http://www.parsonline.net>) Tehran, Iran
Senior Unix/Linux System/Network Administrator: Administration and maintenance of more than 40 servers, responsible for monitoring and surveillance of more than 200 network devices including routers, switches, and etc. , more than 40 servers, and 15000 links, participating in R&D projects for development of new technologies, participating in many national projects including ADSL across the country, and etc.
- September 2000 – May 2002 ParsOnline Corp. Tehran, Iran
Network & Computer Technical Support: Network and computer troubleshooting for internet broadband access users.

PUBLICATIONS AND PRESENTATIONS:

Conferences:

- Amir R. Khakpour and Alex X. Liu, “Iustitia: An Information Theoretical Approach to High-speed Flow Nature Identification,” in *Proc. of the 29th International Conference on Distributed Computing Systems, (ICDCS’09)*, Montreal, Quebec, Canada, June 2009.
- Amir R. Khakpour and Isabelle Demeure, “Chapar: A Cross-Layer Overlay Event System for MANETs,” in *Proc of the Second International ICST Conference on MOBILE Wireless MiddleWARE, Operating Systems, and Applications, (Mobilware’09)*, Berlin, Germany, April, 2009. **BEST PAPER AWARD**
- Amir R. Khakpour, Maryline Maknavicius-Laurent and Hakima Chaouchi, “WATCHMAN: An Overlay Distributed AAA Architecture for Mobile Ad hoc Networks,” in *Proc. of the 3rd International Conference on Availability, Reliability, and Security (ARES’08)*, Barcelona, Spain, March, 2008.
- Amir R. Khakpour and Hakima Chaouchi, ”ESSTCP: Enhanced Spread-Spectrum TCP,” in *Proc. of the 3rd International Workshop on Security in Systems and Networks (SSN’07) in conjunction with IPDPS’07*, Long Beach, CA, March 2007.

Technical Reports:

- Amir R. Khakpour and Alex X. Liu, “Quarnet: A Tool for Quantifying Static Network Reachability,” Technical Report, CSE Dept., Michigan State University, MSU-CSE-09-2, January, 2009.
- Amir R. Khakpour and Isabelle Demeure, “Designing and Prototyping an Event-based Communication System on Mobile Ad Hoc Networks,” Technical Report, INFRES department, Ecole Nationale Supérieure des Télécommunications (GET/ENST), July 2007.
- Amir R. Khakpour, Maryline Laurent-Maknavicius and Hakima Chaouchi, “Through Access Control on Mobile Ad hoc networks: DAROPMAN Project,” Technical Report, LOR department, Institut National des Télécommunications (GET/INT), January 2007.

Magazine Papers and Other Conferences:

- Isabelle Demeure, Guilhem Paroux, Javier Hernando-Ureta, Amir R. Khakpour and Julien Nowalczyk, “An Energy-Aware Middleware for collaboration on small scale MANETs,” *Autonomous and Spontaneous Networks Symposium (ASNS’08)*, Paris, France, November, 2008.
- Amir R. Khakpour, “Data Centers, and its Current Obstacles in Iran,” *Gozarash Computer (Computer Report) Magazine*, vol. 164, pp. 33-37, November 2005.
- Amir R. Khakpour and Fariborz Kiasi, “Introduction to BACnet, a Communication Protocol for Building Management and Automation,” *Iranian Student Conference on Electrical Engineering*, Tehran, Iran, September 2004.
- Ali R. Fereydoonian, Amir R. Khakpour and Fariborz Kiasi, “BMS (Building Management System) and Networking Protocols,” *Sanaate Hooshmand (Intelligent Industry) Journal*, vol. 34, pp. 28-33, December 2002.

Presentations:

- November 2006, 20th Congres De Nouvelles Architectures pour les Communications (DNAC'06), Paris, France.
 - *Through a New Security Architecture in Mobile Ad hoc Networks : DAROPMAN Project*
- October 2006, Network Seminars, Iran Research and Academic Network (IRANET), Tehran, Iran.
 - *An Overview on Routing Protocols for Mobile Ad hoc Networks (MANETs)*
- Spring 2006, Network Seminars, Iran Research and Academic Network (IRANET), Tehran, Iran.
 - *An Introduction to Wireless Sensor Networks: Monitoring the World! (1)(2)(3)*
- September 2005, Network Security Workshop, Institute for Studies in Theoretical Physics and Mathematics (IPM) (<http://www.ipm.ac.ir>), Tehran, Iran.
 - *Introduction to Network/Server Security, Challenges, Threats, and Countermeasures*
 - *Firewalls and NAT/PAT Technologies*
- Summer 2005, TeaNET Conferences, Institute for Studies in Theoretical Physics and Mathematics IPM-IRANET, Tehran, Iran.
 - *Introduction to IDS/IPS, Technologies and Types*
 - *WLAN Security, Protocols and Threats*

COMPUTER SCIENCE SKILLS:

- Graduate Courses: Data Mining, Machine Learning, Graph theory and Algorithmics
- Operating System: Linux, FreeBSD, MS Windows
- Programming Skills: C/C++, JAVA, Python, TCL, Turbo Pascal, Borland Delphi, MATLAB
- Software: OPNet Modeler, NS2, Simulink, MATCAD, PSpice8.0, HSpice, ORCAD9.x, ALTRA Max Plus II, Verilog, Silos, SystemView, LATEX. , Microsoft Office

LANGUAGES:

- English -- Fluent
- French – Intermediate
- Farsi (Persian) --Native Language
- Arabic – Intermediate

REFERENCES:

Available upon request.