

Minas Gjoka

Personal Info

Date of Birth : 10 July 1982
Address : 6398 Adobe Circle Road, Irvine, CA 92617
Phone : 949-943-7440
Email : mgjoka@uci.edu
Web Site : <http://www.ics.uci.edu/~mgjoka>

Research Interests

My research interests in the networking area include *network measurements, online social networks, peer-to-peer systems, network protocols, security and internet modeling*. My advisor is [Athina Markopoulou](#).

Education

- University of California, Irvine
Ph.D. in Networked Systems
Irvine, CA
Mar 2008 -
- University of California, Irvine
M.S in Networked Systems, GPA 3.84/4
Irvine, CA
Sept 2005 - Mar 2008
- Athens University of Econ. and Business, Dept. of Informatics
B.S in Computer Science, GPA 8.8/10 (Graduated 1st)
Athens, Greece
Sept 2000 - Jan 2005

Honours & Awards

- 1st place at the hITEC '08 UC Irvine Entrepreneurship Competition with team Adball
- 3rd place at the SYCR '08 UC Irvine Business Plan Competition with team Adball
- Student award to attend NSDI '08
- Student award to attend USENIX '07
- UCI/CPCC Fellow 2007-2008
- UCI/Networked Systems Fellowship 2005-2007
- 1st in my undergraduate CS program.

Work Experience

- **CAIDA/UCSD**
Research Intern
Reducing pollution at the DNS Root servers
San Diego, CA
Jul 2008 – Sept 2008
- **Telefonica Research**
Research Intern
System design and implementation of a high performance Video On Demand peer-to-peer system
Barcelona, Spain
Jun 2007 – Sept 2007
- **AT&T Labs Research**
Research Intern
Florham Park, NJ
Jun 2006 – Aug 2006

Performance analysis of downloading protocols.

- **University of California, Irvine**
Research Assistant *Sept 2007 –*
Exploring novel uses but also misuses of peer-to-peer systems. Sampling of OSNs and characterization of the social graph.
Teaching Assistant *Jan 2006 – Jan 2007*
Two quarters in “Computer Networks” and one quarter in “Principles of Operating Systems”.
Reader *Sept 2005 – Jan 2006, Jun 2007 – Jan 2007*
One quarter in each of “Intro to Comp Science II”, “Network Laboratory” and “Intro to Computer Organization”
- **Olympic Games 2004/Atos Origin** *July 2004 – Aug 2004*
Helpdesk Supervisor. Administration of paid technicians and volunteer staff.
- **Athens University of Econ. and Business** *Sept 2003 – June 2004*
Worked as a part-time system administrator and lab assistant in the Computer Science lab.

Research Experience

- University of California, Irvine Irvine, CA
Online social networks *Feb 2008 –*
Sampling methodologies and dissemination of applications in Facebook.
VoD over P2P *Jun 2007 –*
Support for backward and forward seeks in a P2P VoD system.
IP Traceback *Jan 2008 – Mar 2008*
Use of network coding to improve traceback
Denial of Service using P2P networks *Jan 2007 – May 2007*
Exploits for Bittorrent to launch DoS attacks to any host on the Internet.
Link loss inference with network coding *Oct 2006 – May 2007*
Usage of network coding in network tomography on general graphs to improve performance and decrease complexity.
IP Fast Re-Routing *Apr 2006 – June 2006*
Simulation and implementation of IPFRR mechanisms which provide temporary recovery paths without microloops in case of unplanned link/router failures.
- Athens University of Econ. and Business Athens, Greece
IEEE CSIDC 2005 *Dec 2004 – Apr 2005*
Member of the CS Department’s Team for the IEEE CSIDC 2005 competition. Our team designed and developed the “Bus Positioning and Utilization System” for planning routes in the public transportation system. The team made it to the semi-final stage.
Undergraduate Dissertation *Oct 2004 – Jan 2005*
Designed and evaluated new improved models of the Internet at the Autonomous System

level. Comparisons with the real Internet graph as well as the output of existing generators in regard to a variety of statistical measures commonly used in the literature. The supervisor of the project was Prof. Martha Sideri.

Publications

- P. Sattari, M. Gjoka, A. Markopoulou, "Network Coding for IP Traceback", *under review in IEEE International Symposium on Network Coding 2010*
- A. Markopoulou, C. Fragouli, M. Gjoka, "A Network Coding Approach to Loss Tomography", *under review in IEEE Transactions on Information Theory*
- M Gjoka, M Kurant, CT Butts, A Markopoulou, "Walking in Facebook: A Case Study of Unbiased Sampling of OSNs", *to appear in Proc. of Infocom '10, June 2010*
- M Gjoka, M Kurant, CT Butts, A Markopoulou, "A Walk in Facebook: Uniform Sampling of Users in Online Social Networks", *Technical Report at arXiv.org, May 2009*
- X. Yang, M. Gjoka, P. Chhabra, A. Markopoulou, P. Rodriguez, "Kangaroo: Video Seeking in P2P Systems", *in Proc. of Usenix IPTPS '09*
- M. Gjoka, M. Sirivianos, A. Markopoulou, X. Yang, "Poking Facebook: Characterization of OSN Applications", *in Proc. of SIGCOMM Workshop on Online Social Networks '08*
- M. Gjoka, C. Fragouli, P. Sattari, A. Markopoulou - "Loss Tomography in General Topologies with Network Coding", *in Proc. of IEEE Globecom '07, Washington DC, Nov. 2007*
- K. El Defrawy, M. Gjoka and A. Markopoulou - "BotTorrent: Misusing BitTorrent to Launch DDoS Attacks", *in Proc. of USENIX SRUTI '07, Santa Clara, CA, June 2007*
- A. Spatharis, I. Foudalis, M. Gjoka, P. Krouska, C. Amanatidis, C. Papadimitriou, and M. Sideri - "Improved Tradeoff-based Models of the Internet", *in Proc. of SIWN/IEEE International Conference on Complex Open Distributed Systems '07, Chengdu, China, July 2007*
- M. Gjoka, V. Ram, X. Yang - "Evaluation of IP Fast Reroute Proposals", *in Proc. of IEEE/Create-Net/ICST COMSWARE '07, Bangalore, India, Jan 2007*

Entrepreneurship

Co-founder of Adball, an online collaborative platform that crowdsources the concept, content generation and dissemination of any advertising campaign. The platform launched in December 2009. More information at <http://www.adball.com/>

Skills

Programming Languages: *C/C++, Java, Python, PHP, Perl*

Mathematical Programming: *Matlab, Mathematica*

Operating Systems: *GNU/Linux, MS Windows*

Database & Server: *MySQL, SQL Server*

Web Design: *HTML/CSS, Javascript, jQuery*

References

Available upon request