

Gayathri Chandrasekaran

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SUMMARY	Seeking a challenging full-time position in wireless industry or research laboratory. Highly skilled and motivated professional with over 5 years of research experience	
EDUCATION	WINLAB, Rutgers University, NJ <i>Ph.D., Computer Science</i>	GPA: 3.9/4.0 Expected: May 2011
	WINLAB, Rutgers University, NJ <i>M.S, Computer Science</i>	GPA: 3.9/4.0 Sep 2006-Oct 2008
	Ohio State University, OH <i>Graduate Student</i>	GPA: 3.7/4.0 Sep 2004-May 2006
	Birla Institute of Tech. & Science (B.I.T.S), Pilani, INDIA <i>M.Sc. (Tech) Information Systems</i>	GPA: 9.5/10 Aug 2000-Jun 2004
EXPERIENCE	AT&T Research Labs, Florham Park, NJ <i>Research Intern</i>	May 2009 – Sep 2009
	<ul style="list-style-type: none">Designed algorithms for vehicular speed estimation using GSM signal strengthEvaluated the performance of algorithms using real-experimental trace	
	Nokia Research Centre(NRC), Palo Alto, CA <i>Research Intern</i>	Jun 2007- Sep 2007
	<ul style="list-style-type: none">Designed a privacy preserving scalable infrastructure for mobile advertisingImplemented a LBS called “Virtual Posting” and ported the application to Mobile DeviceProposed caching of location based data at the wireless routers for scalability and privacy.	
	WINLAB, Rutgers University, Piscataway, NJ <i>Graduate Research Assistant</i>	Sep 2006-Aug 2009
	<ul style="list-style-type: none">[2009-present] Design, implementation and evaluation of algorithms for speed estimation using GSM Signal Strength. <u>Collaboration with AT&T Labs, NJ</u>[2010-present] Acoustic localization of mobile phones in car for driver safety applications[2008] Empirical Evaluation of the limits on localization using signal strength in the high-density ORBIT testbed[2008] Evaluation of algorithms for spoofing detection using 802.11e wireless devices[2007-2008] Design, implementation and evaluation of algorithms for inferring context information about Human Co-Mobility.[2006-2007] Experimental evaluation of a mechanism for bootstrapping a location service using geo-coded postal addresses.	
	Department of CSE, Ohio State University, Columbus OH <i>Graduate Fellow</i>	Sep 2004-Jun 2006
	Dept. of CS, Indian Institute of Science (IISc.), Bangalore, India <i>JNCASR Summer Research Fellow</i>	May 2003 - July 2003
AWARDS & HONORS	<ul style="list-style-type: none">University Fellowship at The Ohio State University, Sep 2004 - Aug 2005JNCASR Summer Research Fellowship, May-Aug 2003Merit Scholarship, BITS Pilani for maintaining a GPA of 10/10, Aug 2000-Jun 2001Certificate of Merit for topping chemistry in AISSCE, May 2000	

SKILLS

Programming languages: C, C++, Perl, Python, Shell scripting, JAVA, J2EE, J2ME
Tools: MATLAB, Wireshark, network and OS tools on UNIX/LINUX

PUBLICATIONS

CONFERENCES & WORKSHOPS

1. *Derivative Time Warping Algorithm for Vehicular Speed Tracking*, **Gayathri Chandrasekaran**, Tam Vu, Alexander Varshavsky, Marco Gruteser, Rich Martin, Jie Yang, Yingying Chen, Under Submission for IEEE Percom 2011
2. *Vehicular Speed Estimation using GSM Signal Strength* **Gayathri Chandrasekaran**, Tam Vu, Alexander Varshavsky, Marco Gruteser, Rich Martin, Jie Yang, Yingying Chen, Proceedings of ACM International Conference on Ubiquitous Computing(UBICOMP), Sep 2010 [AR: 19%]
3. *Detecting Identity Spoofs in 802.11e Wireless Networks*, **Gayathri Chandrasekaran**, John-Austen Deymious, Vinod Ganapathy, Wade Trappe, Marco Gruteser, IEEE GLOBECOM, December 2009 [AR: 34%]
4. *Empirical Evaluation of the Limits on Localization Using Signal Strength: Beyond Cramér-Rao Bounds*, **Gayathri Chandrasekaran**, Mesut Ergin, Jie Yang, Song Liu, Yingying Chen, Marco Gruteser, Rich Martin. IEEE SECON 2009, June 2009 [AR: 19%]
5. *DECODE : Detecting Co-Moving Wireless Device*, **Gayathri Chandrasekaran**, Mesut Ergin, Marco Gruteser, Rich Martin, Jie Yang, Yingying Chen, IEEE MASS, Sep 2008 (short paper) [AR: 20%]
6. *Bootstrapping a Location Service Through Geocoded Postal Addresses*, **Gayathri Chandrasekaran**, Mesut Ergin, Marco Gruteser, Rich Martin, 3rd Intl. Symposium on Location- and Context-Awareness (LoCA, held with UbiComp), Sep. 2007 [AR: 31%]
7. *HIMAC: High Throughput MAC Layer Multicasting in Wireless Networks*, Ai Chen, **Gayathri Chandrasekaran**, Dongwook Lee, and Prasun Sinha, IEEE MASS, Oct. 2006.
8. *Optimizing Broadcast Load in Mesh Networks using Dual Association*, Dongwook Lee, **Gayathri Chandrasekaran**, and Prasun Sinha *Invited Paper, In Proc. of WiMESH (IEEE Workshop on Wireless Mesh Networks)*, Sep. 2005

JOURNALS

9. *DECODE : Exploiting Shadow Fading to Detect Co-Moving Wireless Devices*, **Gayathri Chandrasekaran**, Mesut Ergin, Marco Gruteser, Rich Martin, Jie Yang, Yingying Chen, IEEE Transactions on Mobile Computing, Dec 2009, vol. 8 no. 12 (Extended Version of Mass 2008 Paper)
10. *High Throughput MAC Layer Multicasting over Time-Varying Channels*, Ai Chen, **Gayathri Chandrasekaran**, Dongwook Lee, and Prasun Sinha, Elsevier Computer Communications (COMCOM) , Volume 32, Number 1, pp 94-104, Jan. 2009
11. *GRAIL: A General Purpose Localization System*, Yingying Chen, **Gayathri Chandrasekaran**, Eiman Elnahrawy, John-Austen Francisco, Konstantinos Kleisouris, Xiaoyan Li, Richard P. Martin, Robert S. Moore, Begumhan Turgut, Sensor Review, special edition, Localization Systems, Vol. 28, No. 2, pp.115-124, 2008.
12. *Association Management for Data Dissemination over Wireless Mesh Networks*, Dongwook Lee, **Gayathri Chandrasekaran**, Mukundan Sridharan and Prasun Sinha, Elsevier Computer Networks, 2007

PROFESSIONAL SERVICE

- Peer reviewer for Pervasive 2008, ACM Mobisys 2009, ACM HotMobile 2009, IEEE Transactions on Information and Systems Security, IEEE Transactions on Mobile Computing, IEEE Communication Letters
- Joint Coordinator for APOGEE-2003 (A technical festival), B.I.T.S Pilani, India

MISCELLANEOUS Country of Citizenship : INDIA

VISA Status in US : Permanent Resident