Lalit Agarwal

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Interests	Usable Privacy and Security, Information security, Human-Computer Interaction	
Education	**Master of Mathematics, Computer Science** University of Waterloo, Waterloo, Canada	Sept '14 – Present
	Bachelor of Technology, Information and Communication Technology Dhirubhai Ambani Institute of Information and Communication Technology, Gandhinagar, India	Jul '09 - May '13 CGPA: 8.55/10
Work Experience	**Research Associate, TIFAC, India** Conducted a research study to analyze security threats of popular instant messaging services. Also worked on ensuring network security in the organization using intrusion detection systems to prevent any unauthorized access.	Sep '13 - July '14
Research Experience	**Developing a selective ad-blocking tool** *Mentor: Dr. Saurabh Panjwani, Bell Labs Research, India* Conducted a research study to address the concerns of Indian web users towards the content of on-line advertisements. The user perception of online ads was investigated through a user study which was then followed by developing a selective ad-blocking browser plugin.	Winter '13
	Analysis of a password-recovery attack against APOP *Mentor: Prof. Anish Mathuria, DA-IICT, India* Understood and analyzed a password recovery attack against Authenticated Post office protocol (APOP). The research involved investigating the working of MD-5, the Wang's attack and the conditions needed for such an attack to occur.	Summer '12
	MILLEE (Mobile and Immersive Learning for literacy in Emerging Economies) *Mentor: Prof. Matthew Kam, CMU, USA* My role in the team was to play-test the language learning mobile games being developed. It involved conducting alpha and beta tests on these games to find out any potential bugs, design flaw and submitting formal reports so that they could be fixed.	May '10 – Dec '10
Teaching Experience	**Teaching Assistant, University of Waterloo, Canada** *Course: CS135- Designing Functional Programs*	Fall '14
	Teaching Assistant, DA-IICT, India *Course: IT205- Data Structures and Algorithms*	Fall '12
Selected Projects	**Ad-Filter Firefox Plugin** *Advisor: Dr. Saurabh Panjwani, Bell Labs Research, India* Developed a modified version of the popular Ad-block plus plugin which blocks only embarrassing and sensitive on-line advertisements in contrast to blocking all on-line ads.	Winter '13 *Team Size: 1*
	Ad-Extraction tool *Advisor: Dr. Saurabh Panjwani, Bell Labs Research, India* Developed a tool to identify the content of advertisements present in a given list of webpages. The tool extracts information of both image and textual ads from a given list of webpages.	Winter '13 *Team Size: 1*

NGO Information Management Suite   Winter '12
Advisor: Prof. Asim Banerjee, DA-IICT, India   *Team Size: 9*
Developed a web based information management system for an NGO
for cataloguing their work, evaluating the NGO's performance and creating social
maps of the population in which the NGO operates. I was responsible for
developing the server side interface which involved coding in PHP and JavaScript.

Model for information and knowledge sharing in a network   Winter '12
Advisor: Prof Sanjay Srivastava, DA-IICT, India   Team Size: 1
Proposed a network model which would facilitate sharing of relevant information
across communities to appropriate users in a cost-effective manner. The model
facilitated socialization among like-minded individuals across a network.

P2P File transfer system   Winter '11
Advisor: Prof. Sanjay Chaudhary, DA-IICT, India   *Team Size: 2*
Implemented a client-server system which allowed file sharing between clients in a
network. The project was implement in C and the concepts of socket programming
and shared memory were used.

Analyzing a localization algorithm for wireless sensor networks   Winter '12
Advisor: Prof Sanjay Srivastava, DA-IICT, India   Team Size: 1

Understood and analyzed a novel localization algorithm called APIT (Approximate
Point-in-Triangulation Test). A thorough analysis of the algorithm including
understanding the limitations, simulation of the algorithm in Matlab was done.

Publications   **Do Not Embarrass: Re-Examining User Concerns for Online Tracking and Advertising**, ACM
Symposium on Usable Privacy and Security (SOUPS), 2013
Lalit Agarwal, Nisheeth Shrivastava, Sharad Jaiswal, Saurabh Panjwani, Bell Labs Research,
Bangalore, India

Relevant   Data Structures, Operating System, Introduction to Algorithms, Introduction to Cryptography,
Coursework   Sensor Network Systems, Introduction to Graph theory, System and Network Security, Security
Protocols, Network Protocols, Digital Signal Processing, Computer Networks, System Software,
Software Engineering, Introduction to Artificial Intelligence.

Past   Treasurer, Electronic Hobby Centre, DA-IICT
Activities   Resource Manager, Electronic Hobby Centre, DA-IICT
Coordinator, Youth Run, Synapse'11, Techno-Cultural festival, DA-IICT

Awards and   Mathematics Graduate Experience Award, University of Waterloo, Fall '14
Achievements   Successfully completed Stanford University's course "Introduction to Cryptography" on Coursera.
Ranked among the top 1% students all over India (total 1,000,000 students) in AIEEE-2009 and
IIT-JEE-2009.

Technical   *Languages:* C, C++, Java, PHP, JavaScript
Skills   *Tools:* Matlab, ns2, Selenium webdriver, HTML Labview, PostgreSQL, MySQL

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