

EDUCATION	<b>MS, Computer Science</b> May 2017(expected) <i>Purdue University, West Lafayette, Indiana</i> <b>B.Tech (Hons.), Computer Science and Engineering - CGPA: 9.09/10</b> May 2013 <i>Indian Institute of Technology, Kharagpur, India</i>
COMPUTER SKILLS	<b>Programming Languages:</b> C++, C, Java, python <b>Web:</b> PHP, HTML, CSS, JavaScript <b>Libraries:</b> Android SDK, Qt SDK <b>Profile:</b> <a href="https://github.com/patwaria/">https://github.com/patwaria/</a>
CURRENT PROJECT	<b>Detecting False Data in Crowd-sourced Systems</b> Aug 2015 - present <i>Advisor: Prof. Saurabh Bagchi and Prof. Alex Quinn, ECE Department, Purdue University</i> Working on machine learning techniques in cohesion with human-in-loop systems to distinguish fake reviews from authentic ones or more generally distinguish malicious sources in crowd-sourced information systems. The project is being funded by Google through a Faculty Research Award.
WORK EXPERIENCE	<b>Software Engineer, Samsung R&amp;D Institute India, Bangalore</b> Jul 2013 - Jul 2015 <i>Advanced Research Team</i> <b>Sports Data Analytics (Tennis) :</b> Built an analytics application applying ML and DTW to sensor data from wearable and develop models to help learners improve skill and playing technique. <b>Indoor Floor Map Generation :</b> Contrived a system to generate indoor floor maps on the fly using single portable device with acoustic sensors and fused with dead reckoning system.
PATENTS	“Mehtod and device for generating data representing structure of a room” A. Patwari, G. Mishra, R. Srivastava, D. Patkar and A. De, USPTO Patent No. 20150347638 (PCT/KR2015/005246) “Method and system for video-analysis assisted sensor-data based ball-striking-device head speed estimation” S Indoria, A. Patwari, P. Sinha, India Patent App. 3927/CHE/2014
PREVIOUS PROJECTS	<b>Privacy intrusion in mobile apps, Summer Internship</b> May 2012 - July 2012 <i>Advisor: Prof. Jean Pierre Hubaux, LCA Lab, EPFL, Switzerland</i> Identified metrics for privacy intrusion of mobile applications and analyzed location access history to determine intrusiveness levels in Nokia devices. <b>Fast Scalar Multiplication Methods for Elliptic Curves</b> Aug 2012 - March 2013 <i>Advisor: Prof. Abhijit Das, CSE Department, IIT Kharagpur</i> Explored the application of Lucas chain based Montgomery ladders to attain speedup in scalar multiplication in Elliptic curves over finite fields. <b>Routing in delay tolerant networks</b> Dec 2010 - Jan 2011 <i>Guide: Prof. Niloy Ganguly, CSE Department, IIT Kharagpur</i> Studied the decrement in routing time using Directional antennae over Omnidirectional antennae in a Delay Tolerant Network following SIRS epidemic model.
RELEVANT COURSES	<b>Theory:</b> Algorithms I & II, , Advanced Graph Theory, Cryptography and Network Security Discrete Structures, Formal Languages and Automata Theory, Theory of Computation <b>Systems:</b> Distributed Systems, Computer Networks, Database Management Systems Fault Tolerant Systems, Operating Systems, Computer Organization and Architecture, Compilers <b>Others:</b> Artificial Intelligence, Machine Learning, Information Retrieval Computational Number Theory, Programming and Data Structures, Software Engineering
OTHER PROJECTS	<b>Citation Analyzer</b> , Opensoft Competition, IIT Kharagpur Feb 2013 - March 2013 Led a team of 10 to develop a ASP.Net app Framework which connects to citation websites (Google Scholar), crawls for authors and publications, parses results and provides citation analysis of each. <b>Versioning File System</b> , Opensoft Competition, IIT Kharagpur Feb 2011 - March 2011 Built a versioning file system on top of FUSE(File System in User Space) in the Linux environment.
EXTRA-CURRICULAR ACTIVITIES	<b>Member, Dance Society, IIT Kharagpur</b> April 2010 - April 2013 Participated in various dance competitions and won <b>Silver</b> at Centrifuge, SpringFest, IITKGP, 2010 Conducted dance workshops for 2 years for a batch of 100 freshers. <b>Member, Soccer Team, LLR Hall, IIT Kharagpur</b> April 2011 - April 2013 Represented Hostel soccer team for three years and won <b>Gold</b> in 2011-12