

Pujun Bhatnagar

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Education	Georgia Institute of Technology, Atlanta, GA, USA <i>Bachelor of Science in Computer Engineering with minor in Computer Science</i> Major Specific GPA: 4.0/4.0 Overall GPA: 3.92/4.0 Summa Cum Laude (Expected)	May 2015 Aug'11 - Present
Study Abroad	Worcester College, Oxford University, UK Georgia Tech Lorraine, Metz, France	May'13 - Aug'13 Jan'13 – May'13
Experience	Lead Undergraduate Teaching Assistant at Georgia Tech- Math Dept. <ul style="list-style-type: none"> Taught advance Calculus and Linear Algebra to 37 students in Fall 2013 and basic Calculus in 2 and 3 dimensions to 33 students in Fall 2012 in recitations twice a week Conducted, supervised and graded weekly quizzes, 3 mid-terms and 1 final for 200 students MATHLAB Assistant at Centre for Academic Success at Georgia Tech <ul style="list-style-type: none"> Organized help sessions for Math & Physics. Performed 1-to-1 and group sessions for 7 students per week Technical Intern at Larsen and Toubro and New Delhi Power Limited, India <ul style="list-style-type: none"> Worked with senior engineers to simulate and analyze power grid system of North Delhi. Used data mining techniques in MATLAB, C++, to determine potential flaws in power stations and increase efficiency of the network by 40% 	Aug'13 –Present Aug'12 –Dec'12 Aug'12 –Dec'12 May'12 –Aug'12
Research	Lead Undergraduate Research Assistant under Dr. James McClellan, ECE Dept. for 3 semesters <ul style="list-style-type: none"> Developing mobile application to be used by Tech students to access & finish homework on tablets Includes personalized flashcard app for students to review concepts & enhance student-instructor interaction Concepts Creation & Refinement Team at Georgia Tech <ul style="list-style-type: none"> Designed and implemented 4 algorithms using N-gram analysis; currently in use at Georgia Tech. Improved the student online question search system efficiency by 53% Complete redesign and auto arrangement of concepts within the ITS system using 3 level integration Proposed Instructor Assignment Creation system and improved efficiency by 29% Energy Security Team at Bharat Heavy Electricals Ltd, India <ul style="list-style-type: none"> Worked with senior engineers to evaluate the feasibility of large scale usage of hydraulic energy for electricity Reported 5 changes to Bhakra Dam authorities to improve energy security by 21% Measurement of Scales & Electro-Magnetics, National Physical Laboratory, India <ul style="list-style-type: none"> Worked with 2 scientists to evaluate the accuracy of measuring scales Analyzed RF and FM waves to improve wireless communication as a part of CSIR youth leadership in Science 	Jan'12- Present Aug'13 –Present Aug'12 –Dec'12 Jan'12 – May'12 2010-2011 Jun'08-Nov'08
Projects	Oscilloscope Train Simulation and Simple Computer <ul style="list-style-type: none"> “Trains sharing same tracks” state machine and a Simple Computer implementation using Quartus ALTERA Robot Self-Test (1024 lines of Assembly code) <ul style="list-style-type: none"> Algorithms for auto-testing robot's hardware to help instructor and TAs repair and maintenance hardware “Minesweeper Game solver”, N-cache simulator in C and Assembly (107 lines of Assembly code) “Ninja Fight and Puzzle” game & “Paint Application with Animation” using Java “Pattern Recognition” on ARM Processor using C++ Gameboy and Computer Game Design with Artificial Intelligence <ul style="list-style-type: none"> 3- D games in C using mode-III and mode- IV algorithms for meeting memory and hardware constraints Physical Modeling & Simulation <ul style="list-style-type: none"> 3-D N-Celestial System, Spring Projection Modeling using VPython to study physical & celestial phenomenon 	Jan'13 – May'13 Jan'13 – May'13 Aug'13- Sept'13 Nov'12-Dec'12 Oct'12 Jan'12-Dec'13 Jan'12 – May'12
Skills	Programming Skills: C, C++, Java, MATLAB, MIPS Architecture and Python. Novice in Visual Basic Web & Database Management: HTML, PHP, CSS, LAMP (Linux Apache MySQL PHP), Wordpress CMS Operating Systems & Software: Shell, Bash, CMD Scripting, Linux, Macintosh, ARM and Quartus Languages: English (Fluent), Hindi (Native) and Sanskrit (Advanced Level)	
Leadership	Vice President – Technology, Enterprise to Empower (Student organization at Georgia Tech) ‘Director of Quiz’ – Senior school cabinet <ul style="list-style-type: none"> Conducted state level Science quiz with 30 participating schools and organized weekly meeting of teachers 	Aug'12 –Aug'13 Apr'10 – Apr'11
Extra Curricular Activities	Helped visually impaired professor, Dr. Anil Khurana, Delhi University, with his Research Thesis <ul style="list-style-type: none"> Collected, analyzed data using Excel and SPSS and edited parts of his thesis Part time Science, Mathematics and Social Sciences teacher for visually impaired students Recorded NCERT books on CDs in English and Hindi and volunteer for excursions 	
Areas of Interest	<ul style="list-style-type: none"> Concurrency within processors, data structure & algorithms analysis, optimizations, computer vision, artificial intelligence, computer instruction set architecture, embedded systems & control automation, digital gate and logic design, object-oriented software development, machine learning with big data handling 	
Honors	<ul style="list-style-type: none"> Gold medalist at International Informatics, International Mathematics & Zonal Informatics Olympiad Faculty honors, Dean's List at Georgia Tech and seven year scholar, silver, gold, diamond medalist Active member of IEEE & Eta Kappa Nu ECE honors society at Georgia Tech 	

