Pujun Bhatnagar

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Objective To secure a technical internship at Apple to improve my technical & analytical skills & transition to full time job upon graduation

Education
Georgia Institute of Technology, Atlanta, GA, USA May 2015
Bachelor of Science in Computer Engineering with minor in Computer Science Aug'11 - Present
Major Specific GPA: 4.0/4.0 Overall GPA: 3.92/4.0 Summa Cum Laude (Expected)

Study Abroad
Worcester College, Oxford University, UK May'13 - Aug'13
Georgia Tech Lorraine, Metz, France Jan'13 – May'13

Experience
Undergraduate Teaching Assistant at Georgia Tech- Math Dept.
- 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 — Aug'13 –Present; Aug'12 –Dec'12
- Conducted, supervised and graded weekly quizzes, 3 mid-terms and 1final for 200 students

MATHLAB Assistant at Centre for Academic Success at Georgia Tech Aug'12 –Dec'12
- 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 May'12 –Aug'12
- 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%

Research
Lead Undergraduate Research Assistant under Dr. James McClellan, ECE Dept. for 3 semesters Jan'12- Present
- Developing mobile application to be used by Tech students to access & finish homework on tablets — Aug'13 –Present
- Includes personalized flashcard app for students to review concepts & enhance student-instructor interaction

Concepts Creation & Refinement Team at Georgia Tech Aug'12 –Dec'12
- 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 — Jan'12 – May'12
- Proposed Instructor Assignment Creation system and improved efficiency by 29%

Energy Security Team at Bharat Heavy Electricals Ltd, India 2010-2011
- 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 Jun'08-Nov'08
- 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

Projects
Oscilloscope Train Simulation and Simple Computer Jan'13 – May'13
- **"**Trains sharing same tracks" state machine and a Simple Computer implementation using Quartus

ALTERA Robot Self-Test (1024 lines of Assembly code) Jan'13 – May'13
- 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) Aug'13- Sept'13
"Ninja Fight and Puzzle" game & **"Paint Application with Animation"** using Java Nov'12-Dec'12
"Pattern Recognition" on ARM Processor using C++ Oct'12
Gameboy and Computer Game Design with Artificial Intelligence Jan'12-Dec'13
- 3- D games in C using mode-III and mode- IV algorithms for meeting memory and hardware constraints

Physical Modeling & Simulation Jan'12 – May'12
- 3-D N-Celestial System, Spring Projection Modeling using VPython to study physical & celestial phenomenon

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) Aug'12 –Aug'13
'Director of Quiz' – Senior school cabinet Apr'10 – Apr'11
- Conducted state level Science quiz with 30 participating schools and organized weekly meeting of teachers

Extra Curricular Activities
Helped visually impaired professor, Dr. Anil Khurana, Delhi University, with his Research Thesis
- 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
- 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
- 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