



Pavleen Thukral

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Education

2012 – Current

Georgia Institute of Technology, Undergraduate, Computer Science Major, Deans List
Specializing in Artificial Intelligence and Information Networks

Selected relevant coursework

Georgia Tech

- o Objects & Design(CS 2340), Computer Systems(CS 2110), Systems and Networks(CS 2200), Algorithms(CS 3510), Database Systems (CS 4400), Intro to AI (CS 3600), Machine Learning(CS 4641), Networking(CS 3251), Computer Vision(CS 4495)
- o Calculus 3 for CS (MATH 2605), Combinatorics(MATH 3012), Discrete Math for CS(CS 2050)

Work Experience

Fall 2014 - Current

- o Lead engineer and founder of Stackfolio LLC, a bank asset management startup; valued at \$4 million.
- o Founded and run HackGT, Georgia Tech's first national hackathon, and the largest in the South.

Summer 2015

- o Internship at Bloomberg LP under the Portfolio and Risk Analytics team.
 - o Integrated time series trend functionality into Portfolio function on the Bloomberg terminal.
 - o Developed a distributed Value at Risk system using Spark and Cassandra.

Spring 2013 – Spring 2015

- o Employed by the National Security Agency.
 - o Developed a state of the art algorithm for recognition and retrieval using extremely sparse sample sets.
 - o Advanced digital signals processing and analysis.
- o Working under Dr. Thad Starner with the CCG at Georgia Tech on the following projects:
 - o American Sign Language recognition & wearable socially viable interfaces for disabled persons.
 - o Techniques for Silent Speech Recognition for freeform voice recognition without voice input (**Patent Pending & Published**). The project has since been funded by Google.
 - o Developed novel techniques for hand detection and tracking in depth data (**Published**).

Summer 2012

- o Research intern for the ExplorEcon research group at the University of Chicago. Worked on object recognition software using Google Street View.

Summer 2011

- o 10 week internship with Rama Chellappa, Chair of the Electrical Engineering Department at the UMCP. Created an algorithm for automatically estimating age, based on images of a humans face.
- o Results out-performed most state of the art approaches. (**Work was published at IEEE ICASSP**)

Skills

Programming:

- o Java/Android
- o C, C++, Interactive C
- o Python, Python-Django, Flask
- o PostgreSQL, MySQL, MongoDB
- o HTML5, CSS3, Javascript, JQuery
- o Matlab
- o Spark, Cassandra

Topics of Experience:

- o Machine Learning, Computer Vision, Speech Recognition
- o Digital Signals Processing, Robust Statistics/Estimation
- o Vectorized CPU Optimization (SIMD)
- o Mobile App Development
- o Distributed Systems
- o Web Development – Large work experience

Hackathon Achievements

- 2015 PennApps: Postmates API Prize
- 2014 CalHacks: Best Hardware Hack, Best Realtime Hack
- 2014 MHacks IV: Top 10 Hack**
- 2014 MIT BitComp: 1st Place Round #1
- 2014 VTHacks: BookHolders (Best Web App), Book Holders (Best Combo or Open Source Tech), Salesforce, and IBM (Real World Problems), Best Windows Hack, Rackspace(Best Potential Startup), VT Entrepreneurs Society Award, CapTech(Best Hack), 3rd Place Overall
- 2014 Bitcamp: Best Hack using Kloudless API, Microsoft Technology Prize
- 2014 MHacks: Mashery API prize for Glass Contextual Computing application
- 2013 HackMIT: MoPub Prize Best Use of Mobile Data

Selected Achievements and Honors

- 2015 2nd Place at Bloomberg BPuzzled Programming Competition
- 2014 1st Place in Computer Science at Georgia Tech Undergraduate Research Symposium for work in Silent Speech Recognition**
- 2013 Recipient of Georgia Tech's President's Undergraduate Research Award**
- 2013 1st Place at Georgia Tech Freshman Hall Hack (School wide Programming Competition)
- 2013 1st Place in Computer Science at Georgia Tech Undergraduate Research Symposium for research on Recognition of American Sign Language using Gesture Interfaces
- 2012 Presented with Excellent Young Scientist award from the Director of Science and Technology at the Central Intelligence Agency
- 2012 International Science and Engineering Fair (ISEF) Finalist / 4th place internationally in Computer Science
- 2012 Invited to The National Council for Science and the Environment's National Conference on Science, Policy, and the Environment and honored at the Youth Recognition Event by the Ex-Prime Minister of Norway.
- 2012 Presented with Excellent Young Scientist award from the Director of Science and Technology at the Central Intelligence Agency
- 2012 Captain and Founder of the Falcons FIRST Robotics team 4099 qualified for World Championships in St. Louis, MO
- 2012 International Science and Engineering Fair (ISEF) Finalist / 4th place internationally in Computer Science
- 2012 1st Place in the Computer Science Division of the 56th Montgomery County Science Fair
- 2012 The United States Army Award for achievement in STEM
- 2012 Washington Statistical Society 2nd Place Award for exploration of statistical methodology
- 2012 Mu Alpha Theta Honor Award for excellence in applying mathematics available to high school students.
- 2012 Intel Excellence in Computer Science Award
- 2012 Invited to The National Council for Science and the Environment's National Conference on Science, Policy, and the Environment and honored at the Youth Recognition Event by the Ex-Prime Minister of Norway.
- 2012 Selected as an Intel Science Talent Search Semifinalist
- 2011 Research presented at the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP) in Kyoto, Japan