Tejeswini Sundaram

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Education B.Tech. in Computer Science,

Manipal Institute of Technology, Manipal University, India.

CGPA: **9.41 / 10.00**

Area of Interest

Programming Languages, Compilers, Parallel Computing and Machine Learning.

Experience

Project Assistant, HPC Lab, SERC, IISc, Bangalore.

Aug 2015 - Present.

May 2015

- \bullet Working in areas of many core - multicore architecture and parallel computing.
- Research on accelerated computer vision algorithms on heterogenous compute.

Research Intern, HPC Lab, SERC, IISc, Bangalore.

Jan - Aug 2015.

- Formulated bachelor thesis project titled, "AlCoViC: Accelerated Computer Vision using Heterogenous Coprocessors."
- Analyzed performance, execution time, core utilization, and overheads in the chosen OpenCL accelerated OpenCV benchmark algorithms.

Summer Intern, Microsoft, Bangalore.

Jun - July 2014.

- Designed and developed the MCS India Delivery Dashboard for customer centric delivery tracking.
- Implemented the web-enable dashboard for information management and actionable decision making using C#, visual studio and metro apps design.

Summer Intern, Tata Consultancy Services, Chennai.

Jun - Jul 2013.

- Worked on an internal communication software, using Java Language. Built the front end and linked the database to the backend of the system.
- GE Foundation Scholar, GE JFWTC Centre, Bangalore. May Jun 2013.
 - Designed "Scavenger", a frugal smart waste management system with an innovative sanitary napkin incinerator and wireless central monitoring system for Indian buildings.

Winter Schools

IPTSE Winter School, Carnegie Mellon University.

Dec 2014.

- Research on "Voice Forensics", a system to identify bodily features and demographic information about a miscreant from the voice evidence collected.
- Analyzed audio features such as signal energy, loudness, pitch, MFCC, PLP-CC, voice quality, and formants.
- The Framework developed, using neural networks, consisted of audio feature extraction, machine learning tools, classification and regression algorithms.

I-CARE Winter School, IBM India Research Labs.

Oct 2014

• Studied about the current trends in areas of Deep Learning, Machine Learning and Big Data Analytics.

Thesis Presentation

• "AlCoViC: Accelerated Computer Vision using Heterogenous Coprocessors.", Sundaram T. (2015). Unpublished Bachelor Thesis, Manipal Institute of Technology. Guide: Prof. R. Govindarajan, Indian Institute of Science & Prof. Prema K.V., Manipal Institute of Technology.

Poster Presentation

• "Voice Forensics", Tejeswini Sundaram, Priya Soundarajan, Sakthivel.S, and Utkarsh Pathange at CMU Internship Program in Technology Supported Education (IPTSE) Winter School, held by CMU and NITK Surathkal, December 2014. (Best Poster Award)

Publications

- "Binary Encryption based on a Rubiks Cube", Tejeswini Sundaram, Vyom Chabbra, International Conference on Computational Methods in Engineering and Health Sciences (ICCMEH), 2014.
- "Word Existence Algorithm", Tejeswini Sundaram, Vyom Chabbra, International Conference on Computational Methods in Engineering and Health Sciences (ICCMEH), 2014.

Leadership Activities

Program Committee Member, Systems Track, GHCI-2015.	2015
Chairperson, IEEE Student Branch Manipal.	2014
Judges and Reception Head, Tesseract, IEEE SBM tech-fest.	2014
Team Manager, Team Internet, GE Foundation Scholar Leader Program.	2013
Technical Committee Member, IEEE SBM.	2012
Sports Captain, St Francis Xavier Girls High School.	2009
Hostel Representative, SFX Hostels.	2009
House Prefect, St Francis Xavier Girls High School.	2008

Honors & Awards

GE Foundation Scholar- Leader Scholarship (GEFSLP) Award 2013-15.

AICTE Scholarship, Government of India, 2011-15.

GHCI Student Scholarship, Grace Hopper Celebration India (GHCI), 2015.

Best Project Award, CMU IPTSE Winter School, 2014.

Best App Award, Microsoft App Fest, 2014.

Rotary Youth Leadership Awards (RYLA), RI District 3160, 2012.

Sri Bhagwan Mahaveer Jain Scholarship for pre-university study, 2009 -11.

Computer Skills

Languages: C, C++, C#, Java, Python, OpenCL, OpenMP,

MPI, OpenCV.

Software: Git, Vtune Amplifier, Gdb, Visual Studio, Weka,

Caffe

Operating Systems: Microsoft Windows, OpenSUSE, Ubuntu, Debian

Wheezy.

References

Will be provided on request.