

# ABHINAV SHANKARANARAYANAN VENKATARAMAN

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- SUMMARY** Self-motivated, passionate Computer Science student with extensive internship experiences in Algorithm design and development. Strong foundation in Graph Algorithms, Fuzzy Logic and Expert Systems. Recognized as an effective leader and possess excellent communication skills.
- EDUCATION** **SASTRA University, Thanjavur, Tamil Nadu, India** 2012-2016  
URL: <http://sastra.edu/>  
Bachelors in Computer Science and Engineering • *CGPA* : 8.31/10
- SKILLS** **Programming & Simulation:** C, C++, Java, Python, L<sup>A</sup>T<sub>E</sub>X, MATLAB  
**Version Control:** git  
**Tools & IDE:** Rational Rose, Net Beans, Geany, Dev C++  
**Media:** Adobe Photoshop, GIMP  
**Operating System:** Windows, Linux
- PUBLICATION** **Effective Management of Bus Transportation through Design of a Fuzzy Expert System**, *ARPJ Journal of Engineering and Applied Sciences*, vol. 10, no. 6, pp. 2392-2399, April 2015  
<http://www.arpnjournals.com/jeas/research-papers/rp.2015/jeas.0415.1773.pdf>
- RESEARCH EXPERIENCE** **Universitat Politecnica de catalunya (UPC) BarcelonaTech, Barcelona, Spain**  
Research Internship Program, Semester Abroad Program (SAP) in the Final Semester  
URL : <http://www.fib.upc.edu/fib.html> Feb 2016 – June 2016
- At the Laboratory for Relational Algorithmics, Complexity and Learning (LARCA) under Prof. Ricard Gavaldá. <https://www.cs.upc.edu/~gavald/>
  - Project on “Study and implement algorithms for finding *frequent trajectories* in temporal events. we would be considering batch data, particularly from medical domain”
  - This opportunity will allow me to complete my undergraduate final year project-thesis
- Tokyo City University, Japan** July 2015  
Research Exchange Program, Sakura Student Exchange Program in Science  
URL : <https://www.tcu.ac.jp/english/>
- *Only Student* from school of computing, SASTRA University and one of 9 students selected to represent the University in student exchange program
  - Designed an algorithm to recognize edema of the brain given its X-Ray CT image
- The Institute of Mathematical Sciences (IMSc), Chennai, India** June 2015  
URL : <http://www.imsc.res.in/theoretical.computer.science>  
Visiting summer intern, Theoretical Computer Science (TCS) group
- *Top 20* student from whole of India for the internship program and was also offered a stipend
  - Designed and developed a 2-OPT algorithmic solution for Harmonious coloring of graphs (an NP complete problem)
  - Performed extensive research study with a postdoc student on Chordal graphs
  - Presented original ideas on “Chordal graphs and k-trees”
- Indian Institute of Information Technology Design and Manufacturing (IIIT D&M), Kancheepuram, India** URL : <http://www.iiitdm.ac.in/> June 2014  
Research internship in Theoretical Computer Science
- Investigated deterministic and non-deterministic algorithms
  - Identified Polynomial time sub-problems for various NP-Complete problems
  - Researched intensively on combinatorial problems, graphs algorithms and Knight Graphs

<b>HONORS /AWARDS</b>	• Dean's Merit List (Top 10%), SASTRA University	2012-13, 2013-14
	• First Rank, Linux programming course, School of Computing, SASTRA University	2013
	• First prize, 'Game of Bugs' debugging event, Tathva'13, National Institute of Technology, Calicut	2013
	• First prize, 'Crack the code' coding event, Daksh7, SASTRA University	2013
	• First prize, 'Vayuratha' RC plane making, Daksh7, SASTRA University	2013
	• Best Project in Computer Science (Class 12), P.S.Senior Secondary School, Mylapore Chennai, India	2012
<b>LEADERSHIP ROLES</b>	<b>DAKSH, Techno-management fest, SASTRA University, Thanjavur</b>	
	Computing Cluster Head	2015-2016
	<ul style="list-style-type: none"> <li>• Design and plan technical events in field of computing to cater to participating strength of more than 1000 students</li> </ul>	
	<b>Association of Computer Engineers (ACE), Department of Computer Science, School of Computing, SASTRA University, Thanjavur</b>	
	General Secretary	2014-2015
	<ul style="list-style-type: none"> <li>• Organized Intra-Department technical fest Protocol III</li> <li>• Initiated, organized and managed – Coding, web development and networking clubs</li> <li>• Conducted sessions in data structures and algorithms for sophomores and juniors</li> </ul>	
<b>COMMUNITY SERVICE</b>	A part of the Center for Rural Development Studies(CRDS), SASTRA University, Thanjavur. Organized camps to teach school children and involving in the rural development projects of the University.	
<b>OPEN SOURCE CONTRIBUTION</b>	<b>GNOME Calculator Project</b> ( <a href="https://github.com/abhinavsv3">https://github.com/abhinavsv3</a> )	2014
	<ul style="list-style-type: none"> <li>• Developed approved patches in XML and Vala for correcting minor bugs</li> <li>• Wrote accurate and optimized code for calculator buttons and improved user-interface</li> </ul>	
<b>EXTRA-CURRICULAR ACTIVITIES</b>	Member of <i>Sakura Science Club</i> , Japan	
	Participant Programmer <i>ACM ICPC</i> Programming Contest	
	Attended <b>International Conference for “Data science and intelligence” Conference</b>	
	Member of the “Computer Society of India”	
<b>REFERENCES</b>	Developed a Weed removal robot at the e-yantra contest - Indian Institute of Technology, Bombay	
	• Dr. Ricard Gavalda Full Professor	
	• Dr. K Kannan	
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