

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:8.35/10 • Passed in First Class with Distinction.
- SKILLS** **Programming & Simulation:** C, C++, Java, Python, L^AT_EX, 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/~gavalda/> and Prof. Marta Arias <https://www.cs.upc.edu/~marias/>.
 - Project on “Graph algorithms for visualizing high dimensional data”
 - This opportunity allowed me to complete my undergraduate final year project-thesis successfully securing a score of 9.8/10 at UPC Barcelona.
- 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 intern
- 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

HONORS /AWARDS	<ul style="list-style-type: none"> • 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
	LEADERSHIP ROLES
	DAKSH, Techno-management fest, SASTRA University, Thanjavur Computing Cluster Head 2015-2016 <ul style="list-style-type: none"> • Design and plan technical events in field of computing to cater to participating strength of more than 1000 students
	Association of Computer Engineers (ACE), Department of Computer Science, School of Computing, SASTRA University, Thanjavur General Secretary 2014-2015 <ul style="list-style-type: none"> • Organized Intra-Department technical fest Protocol III • Initiated, organized and managed – Coding, web development and networking clubs • Conducted sessions in data structures and algorithms for sophomores and juniors
	COMMUNITY SERVICE
	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.
OPEN SOURCE CONTRIBUTION	GNOME Calculator Project (https://github.com/abhinavsv3) 2014 <ul style="list-style-type: none"> • Developed approved patches in XML and Vala for correcting minor bugs • Wrote accurate and optimized code for calculator buttons and improved user-interface
	EXTRA-CURRICULAR ACTIVITIES
	Participant in HackUPC - Hackathon and Hackathon for better driving held at UPC Barcelona Participated in Mobile world Congress held at Barcelona. Participated in Graph-TA Conference at UPC Barcelona. Member of <i>Sakura Science Club</i> , Japan Participant Programmer <i>ACM ICPC</i> Programming Contest Attended International Conference for “Data science and intelligence” Conference Member of the “Computer Society of India” Developed a Weed removal robot at the e-yantra contest - Indian Institute of Technology, Bombay
REFERENCES	<ul style="list-style-type: none"> • Dr. Ricard Gavalda, Full Professor, Universitat Politecnica de Catalunya, Department of Computer Science, LARCA research group gavalda@cs.upc.edu • Dr. Kannan K, Dean, School of Humanities & Sciences, Department of Mathematics, SASTRA University, Thanjavur kkannan@maths.sastra.edu • Dr. Sai Ram N, Associate Dean, Department of Information Technology, School of Computing, SASTRA University, Thanjavur sairam@cse.sastra.edu • Dr. Sridharan M, Professor, Department of Electrical and Communication Engineering, School of Electrical and Electronics Engineering, SASTRA University, Thanjavur m.sridharan@ece.sastra.edu