

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, Expert Systems and Web technology. Recognized as an effective leader and possess excellent communication skills.
- EDUCATION** **University of Florida, Gainesville, Florida, United States of America** 2016-2018
Master of Science in Computer Science at Computer and Information Science and Engineering Department. • Achievement Award Scholarship
Courses: Analysis of Algorithms, Formal Language Computation, Distributed Operating Systems
- SASTRA University, Thanjavur, Tamil Nadu, India** 2012-2016
Bachelors in Computer Science and Engineering • CGPA: 8.35/10 • Dean's Merit List • First Rank in Linux Programming • Passed in First Class with Distinction.
- SKILLS** **Programming & Simulation:** C, C++, Java, Python, L^AT_EX, MATLAB, JavaScript
Web Framework & Visualization Tools: Web.py, Alchemy.js, D3.js
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**, *ARNP Journal of Engineering and Applied Sciences*, vol. 10, no. 6, pp. 2392-2399, URL: <http://www.arnpjournals.com/jeas/research-papers/rp-2015/jeas.0415-1773.pdf> April 2015
- RESEARCH EXPERIENCE** **Universitat Politecnica de catalunya (UPC) BarcelonaTech, Barcelona, Spain**
Research Internship Program, Semester Abroad Program (SAP) in the Final Semester at Barcelona School of Informatics (FIB) (<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” <http://hdl.handle.net/2117/88495>. Louvain algorithm was implemented in python and web interface for visualization of the output was created using JavaScript and Web.py.
 - Completed my undergraduate final year project-thesis successfully securing a score of **9.8/10** at UPC Barcelona.
- Tokyo City University, Japan**
Research Exchange Program, Sakura Student Exchange Program in Science
URL: <https://www.tcu.ac.jp/english/> July 2015
- *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**
Visiting summer intern, Theoretical Computer Science (TCS) group
URL: <http://www.imsc.res.in/theoretical.computer.science> June 2015
- *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**

Research internship in Computer Science

URL :<http://www.iiitdm.ac.in/>

June 2014

- 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**

- Desh-Videsh Scholarship applicant for working on internship outside India in the final semester.
- 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

- 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

- 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 founding team member of the Center for Rural Development Studies(CRDS), SASTRA University, Thanjavur. Organized camps to teach school children and also involved in the rural development projects of the University.

**OPEN SOURCE
CONTRIBUTION**

GNOME Calculator Project (<https://github.com/abhinavsv3>)

2014

- 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**

Tech guru at ACM - University of Florida

August 2016

Participant in **Hackathon** for better driving held at UPC Barcelona

April 2016

Participant in **Hackathon** for better driving held at UPC Barcelona

April 2016

Participated in *Graph-TA* Conference at UPC Barcelona.

March 2016

Participated in *Mobile world Congress (MWC)* held at Barcelona. Feb 2016

Participant in HackUPC - **MLH Hackathon** at UPC Barcelona

Feb 2016

Member of *Sakura Science Club*, Japan

July 2015

Participant Programmer *ACM ICPC* 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