

Abhishek Singh

CAREER OBJECTIVE

To the gain industrial exposure and enhance my skills under the supervision of great experts from world's prominent organization in a vibrant working environment.

EDUCATION

- Bachelor of Technology (2010 - 2014) **B.Tech in Computer Science and Engineering**, Amrita Vishwa Vidyapeetham, Kollam, Kerala, India.
CGPA : 8.57/10 (Upto 5th semester)
- Higher Secondary CBSE (2009) **Central Academy**, Kota, Rajasthan, India.
Percentage : 81.2%
- Secondary CBSE (2007) **R.P.S Public School**, Patna, Bihar, India.
Percentage : 92.7%

SCHOLASTIC ACHIEVEMENTS

- **Top contributor** in '**Algorithm and Data Structure**' group (more than 7500 members) on LinkedIn
- Got scholarship for final semester study at any of these university UPC- Spain, U O Paderborn – Germany, Politecnico di Milano- Italy.
- Listed as one of the **top contributors** of **SSSD**(System Security Service Daemon)- a most popular open source Fedora's project.
Reference: <https://launchpad.net/sssd>
- 1st Rank in **Hack The Shell** (shell scripting) event conducted by **Vortex** at **NIT**(National Institute of Technology) Trichy.
- 2nd Rank in **Crack The Shell** (shell scripting) event conducted by **CSI(Computer Society of India)** Kerala State Student Convention at Thangal Kunju Musaliar College of Engineering, Kollam, Kerala
- **Certificate of Accomplishment** for successfully completing **Software Testing(CS258)** course with final tests conducted by Udacity.
- Awarded with Certificate of Merit from CIR(Corporate and International Relations) department Amrita Vishwa Vidyapeetham for outstanding SSR(Student Social Responsibility) Project.
- Graded **3.7** out of **4** in **NCSA**(National Computer Science Academy) **JavaScript Certification** Exam
- Our Team ranked **9th** out of final 30 teams in **SCTF,Capture The Flag** style hacking contest(August,2012)
- Honored with **proficiency prize** during 2010(Semester 1)

- **Best Student** Award for getting highest marks in **Maths** exam conducted by **Rachna Sagar Pvt Ltd** which is one of the top textbook publisher company.

AREAS OF INTEREST

Data structures, Algorithms, Software development and testing

SELECTED PROJECTS

3D Surveillance

Environment *C#, openCV, Windows, Linux, Kinect camera*

Description Currently I am working on my final year project, 3D face matching technique using interest points and local histograms to develop a 3D surveillance software to overcome the problems faced in 2D surveillance.

Trident Shell

Environment *C++, Unix*

Description Developed a shell compatible with **Linux** and **Mac OSx**. Also an Open Source Software and is currently under **copyright** process. Features implemented: **Tab auto-completion**, **history**, support for pipe, redirection, background, all external and shell built-in commands, colorization to output of commands such as ls, grep, fgrep, egrep.

References open sourced at: <https://github.com/AbhishekKumarSingh/Trident>

Emanio To-do list

Environment *JavaScript, HTML, CSS*

Description Implemented a simple to-do list. Features Implemented: easy to use, supports *emoticons* and text formatting using *Bold*, *Italic* button.

References Open sourced at: <https://github.com/AbhishekKumarSingh/emanio>

Algorithms' Implementations

Environment *C, C++*

Description Effectively implemented variety of algorithms such as *elementary* sorting algorithms, *advanced* sorting algorithms, selection algorithms, different data structures and many more.

References Details at: <https://bitbucket.org/abhisheksingh/algorithms>

Open Source Contributions

Organization **Fedora**

Environment *C, Cmocka unit testing framework, Unix, Git*

Description worked on writing **test suites** for **SSSD**(System Services Security Daemon) using **cmocka** unit testing framework. Learned concepts of memory management library(**Talloc**), and event driven programming (**Tevent**). Implemented tests for find_uid and io module with **85** percent coverage. Also fixed some bugs.

References open sourced at : <https://github.com/AbhishekKumarSingh/sssd/>

Organization **Mozilla**
 Environment *Python, Unix, Pep8, Pyflakes, Git*
 Description worked on expanding unit tests for **mozbase** using python unit testing framework with better code coverage. Implemented unit-test for moznetwork module.
 References open sourced at : <https://bitbucket.org/abhisheksingh/mozbase>

Organization **Tor**
 Environment *Python, Unix, Git*
 Description improved automated tests for Stem. Deals with sanity checking and significant clean-up of codes, eventually fixing and reporting some major bugs
 Reported bug <https://trac.torproject.org/projects/tor/ticket/8157>
<https://trac.torproject.org/projects/tor/ticket/8271>
 Fixed bug <https://trac.torproject.org/projects/tor/ticket/7926>

Organization **MoinMoin(March 2012)**
 Environment *Python, Unix, Mercurial*
 Description Improved the condition of codes for user settings form and user registration form by performing sanity checking and significant clean-up of codes, eventually fixing and reporting some major bugs
 References open sourced at: <https://bitbucket.org/abhisheksingh/moin-2.0>

Organization **Mozilla**
 Environment *JavaScript, HTML, CSS*
 Description Improving code quality by removing unsupported features, effective testing and sanity checking, fixing bugs and submitting patches.
 References Fixed bug: https://bugzilla.mozilla.org/show_bug.cgi?id=650322
https://bugzilla.mozilla.org/show_bug.cgi?id=699041

Organization **Ubuntu**
 Environment *launchpad, Bazaar, Scripting*
 Description Removed unsupported deprecated option which was present in bash-completion package.
 References sourced at: <https://bugs.launchpad.net/ubuntu/+source/bash-completion/+bug/818475>

COMPUTER SKILLS

Operating Systems	GNU/Linux, Windows	Programming Languages	C, C++, Python, Java(basic), SQL
Script Languages	Bash shell scripting, JavaScript	Web Development	HTML, CSS, JavaScript
Version Control Systems	Git, Mercurial and Bazaar	Automation Tools	Pytest, Python unit-test framework, Cmocka-unit testing framework

Code Coverage Tools Coverage, Figleaf

Forensic Tools/Others Test disk, Photorec, Valgrind

DEMONSTRATED PERSONAL SKILLS

Analytical and Planning Designed and implemented the Trident shell(basic shell), which required in depth analysis and rigorous planning.

Fast Learner Quickly learned and implemented many algorithms.

Communication skills Good communication skills-Addressed around 700 people during Anti-Tobacco campaign organized as a part of Student Social Responsibility Project.

Leadership Took up leadership roles in all academic / co-curricular activities. I was student coordinator of crowd control department for Amma's Birthday Celebrations

PAPERS AND PUBLICATIONS

- o Published a tips on 'Recording of terminal session' in November 2013 in OSFY(Open Source For You) magazine, a most popular open source magazine.

ACTIVITIES

FOSS Club An active member of Free and Open Source Software Club.Mentored many junior students in learning new technologies.

Volunteering Took part in various charitable works of Mata Amritanandamayi Math, including, AMMA's Birthday celebration and Amala Bharatam Cleanup Drive - a pan India cleanup program initiated by the Math.

PERSONAL DETAILS

D.O.B 13th April, 1992

Languages English, Hindi

Blogging I blog at <http://abhisheksingh01.wordpress.com>.

REFERENCES

Shall be produced upon request