

| Academic Credentials | | | |
|------------------------------|--------------------------------|-----------------|------------------|
| Institute/School | Degree/Exam | Percentage/CGPA | Year |
| IIT Kharagpur | BTech (Hons) Civil Engineering | 6.50/10 | July 2009 - 2013 |
| Sri Chaitanya Junior College | Board of Intermediate, AP | 93.7% | 2009 |
| Naagarjuna High School | Secondary School Certificate | 92.83% | 2007 |

Employment

Software Engineer

Altair Engineering

May 2013 - Present

Model Based Testing (R&D Engineer)

May 2013 – Jul 2014

- Involved in development of software for "Automation of GUI Testing". Implemented *Image Processing* algorithms in C++ including '*reading/writing an image to get byte_data (using **libpng** library)*', '*gray scaling*', '*thresholding*', '*edge detection*'(**Laplace**), *alpha-blending & template matching of an image*, *OCR for bitmap/raster screen fonts(@96 DPI)*. Also, knows *integration of **OPENCV*** and use its *functions*.
- Did immense research on **Tesseract-OCR** (an open-source OCR engine) and tried to modify existing code thus achieving at-least 95% of accuracy in text-recognition for screen fonts from a very poor recognition earlier.

PBS Works

August 2014 - Present

- Fixed some GA (General Availability) bugs related to Scheduler part in the commercial product PBS Works.
- Also implemented two RFEs(Request for Enhancements) and written EDD(External Design Document) for them.

B.Tech Project

Department of Civil Engg.

Semester 7 & Semester 8

- Sem-7:** Implemented Runge-Kutta 4th order Numerical Algorithm for solving set of Coupled First Order Non-Homogenous Variable Co-efficient Differential Equations.
- Sem-8:** Stress analysis to find deformations on plates using Rotation Free Triangles.

Additional Project

Dept. of Computer Science Engg.

Semester 7

- Implemented (approximate) Box Covering Algorithm (an NP-complete problem) to find the Fractal Dimension of a Complex Network. Analyzed the variation of Fractal Dimension for a Time Varying Real World Network.

Summer Project

IIT Kharagpur

Summer 2012

- Designed a Web PDF Generator to generate solutions for problems in subject "Design of RC Structures". (<http://www.github.com/tsndiffopera/intern.core/>).

Summer Internship

Kulsara LLC

Summer 2011

- Designed Dynamic Worksheets and Question Generator Scripts in PHP for grade-8 students.

Summer Internship (Addl.)

Demand Fair at Penn State

August 2011

- Designed a Dynamic Website for the organization, "Demand Fair at Penn State"(Using the CMS, WordPress) and explain the client how to use the site under my absence. (<http://www.fairtradepennstate.com/>)

Own Projects

- Developed an interactive web application **GOBOT** which responds to user queries in various fields of Science and Engg (Technologies Used: *Wolfram API, PHP, XML, HTML, CSS, JavaScript*).
- Participated in YAHOO HACKU -2012 and developed an interactive search engine, bigBOSS, parsing multiple API's (Technologies Used: *Wolfram API, YAHOO BOSS API, YQL, XML, PHP, JavaScript*).
- Developed a txtweb platform based web application named **@crammer** which is useful to browse internet through mobile with just texting (Technologies Used: *Wolfram API, Python, XML, GOOGLE APP ENGINE*).

CourseWork (Math & Tech Related)

- Introduction to Algorithms, Calculus, Probability and Statistics.

Languages and Technologies

- C/C++(Proficient), Java(Intermediate), PHP(Intermediate), HTML, CSS, JavaScript, Python(Intermediate).
- CMS(WordPress, Joomla), Mathematica(Intermediate), MATLAB, Wolfram-Alpha API, YAHOO-BOSS API, sympy.

Extra Academic Activities

- Was a Top Performer in two coding competitions on **Gild** and was gifted a 1TB hard disk for a "Password Recovery Coding Challenge".
- Was a Core Organising Team Member and part of Web Development Team of Kshitij (Tech fest of iitkgp) 2012.
- Has made coding contribution to an Open Source Organisation, "sympy", during selections for GSOC 2012.