Homepage: http://home.iitk.ac.in/ shubhag shubhag@iitk.ac.in Phone: 9621255599

#### Education

Indian Institute of Technology, Kanpur

8.6/10 CPI

B. Tech, Computer Science and Engineering(2012 - present)

Tagore International School, Jaipur

89%

Class 12(2012)

Tagore International School, Jaipur

9.8/10 CGPA

Class 10(2010)

## Scholastic Achievements

- Secured an All India Rank 155 in IIT-JEE 2012 and All India Rank 105 in AIEEE 2012
- Awarded the prestigious Kishore Vigyan Protsahan Yojna(KVPY) fellowship in year 2012
- Secured an All India 4<sup>th</sup> position in National Science Olympiad 2012
- Secured an All India 11<sup>th</sup> position in International Mathematics Olympiad 2012

### Projects

#### Video Surveillance

Summer Project mentored by Prof. Harish Karnick

May 2014 - present

- The project involved improving video surveillance system for traffic monitoring in IIT Kanpur
- Extracted relevant frames from camera feed to reduce storage space required for data
- Analyzed and implemented adaptive background subtraction algorithms static frame difference, optical flow and mixture of Gaussians method (MOG) for background modeling
- Implemented Voila-Jones object detection framework for classifying interesting objects
- Extracted candidate license plate areas from images as a first step towards License Plate Recognition. The candidate areas were optimized for character recognition using morphological operations

# Jutja.com

StartupMar 2014 - present

- Co-Founder of jutja.com, a project management website with mind-mapped tasks
- Designed the user interface of website and currently working as a front end developer
- Implemented mind-mapped visualization of tasks using Vivagraph library in JavaScript

# Online C Compiler

Summer Project mentored by Prof. Amay Karkare

May 2014 - Jun 2014

- Developed a website to compile and run c programs on an online platform
- Integrated Ace Editor Plugin for proper code formatting and different programming problems for practice

#### E-Glove

Summer Project under Electronics Club, IITK

May 2013 - Jun 2013

- Designed an electronic wearable glove that uses hand gestures to control mouse and keyboard
- Implemented simulation of mouse and keyboard using a C program

## Instifreaks

Application developed in Yahoo! HackU 2013

Aug 22<sup>nd</sup> - 25<sup>th</sup> 2013

- Developed an android reminder app to wake up user to attend lectures on time
- The app initiates an alarm before lecture time. If user does not attend alarm, app sends a "wake me up" message to user's friends

## Technical Skills

Programming Languages: C/C++, JavaScript, HTML, CSS, Bash, Perl, MySQL, Python, Nodejs

Other Tools: Git, LATEX, OpenCV, GNU Octave Operating Systems: Linux based OS's, Windows

## **Extra-Curricular Achievements**

2013 Won 1<sup>st</sup> prize in Electromania (made a snake game) in Techkriti, annual technical festival of IIT Kanpur

**2013** Won **2**<sup>nd</sup> **position in Embedded** (made a bubble burst game), Takneek

**2012** Won  $2^{nd}$  position in Electromania in Takneek, made a frog game using basic ICs

## Position of Responsibility

• Coordinator, ECDC, Techkriti'14 - annual technical festival of IIT Kanpur

Nov 2013 - Mar 2014

• Secretary, Electronics Club, IIT Kanpur

May 2013 - Mar 2014

• Secretary, Public Relations, Antaragni'13 - annual cultural festival of IIT Kanpur

Sep 2013 - Oct 2013