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 the year 2012
- Secured an All India 4th position in National Science Olympiad 2012
- Secured an All India 11th position in International Mathematics Olympiad 2012

## **Projects**

#### Video Surveillance

Summer Project mentored by Prof. Harish Karnick

May 2014 - present

- The project involved improving the video surveillance system for traffic monitoring in IIT Kanpur
- Extracted interesting frames from the camera feed to reduce the 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 the Voila-Jones object detection framework for classifying the interesting objects
- Extracted candidate license plate areas from the images as a first step towards License Plate Recognition. The candidate areas were optimized for character recognition using morphological operations

#### Jutja.com

StartupMarch 2014 - present

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

# Online C Compiler

Summer Project mentored by Prof. Amay Karkare

May 2014 - June 2014

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

### E-Glove

Summer Project under Electronics Club, IITK

May 2013 - June 2013

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

Application developed in Yahoo! HackU 2013

22-25 August 2013

- Developed an android reminder app to wake up the user to attend lectures on time
- The app initiates an alarm before the lecture time. If user does not attend the 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 1st prize in Electromania (made a snake game) in Techkriti, annual technical festival of IIT Kanpur

2013 Secured 2nd position in Embedded (made a bubble burst game), Takneek

2012 Achieved 2nd position in Electromania in Takneek, made a frog game using basic ICs

## Position of Responsibility

• ECDC Coordinator, Techkriti'14

Nov 2013 - Mar 2014

• Secretary of Electronics Club, IIT Kanpur

May 2013 - Mar 2014

• Secretary of Public Relations, Antaragni'13

Sept 2013 - Oct 2013