

## Education

- **Indian Institute of Technology, Kanpur** Current CPI 8.6 on a scale of 10  
*B.Tech, Computer Science and Engineering*
- **Tagore International School, Jaipur** 89%  
*Class 12*
- **Tagore International School, Jaipur** 9.8  
*Class 10*

## 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 by the Department of Science and Technology, Government of India 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
- Achieved an All India Rank-268 in NSTSE-2011

## 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
  - Recognized useless frames and **extracted interesting frames** from the camera feed to **reduce the storage space** required for data
  - **Analysed and implemented adaptive background subtraction algorithms** - static frame difference, optical flow and mixture of Gaussians method (MOG) for background modelling
  - Implemented the **Voila-Jones object detection framework** for classifying the interesting objects
  - **Extracted candidate licence plate areas** from the images as a first step towards Licence Plate Recognition. The candidate areas were **optimised for character recognition using morphological operations**
- **Jutja.com**  
*Start-up March 2014 - present*
  - **Part of a start-up 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 practise 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
- **Instifreaks**  
*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 firstly initiates an alarm. If user does not attend the alarm, it sends a "wake me up" message to users friends

## Technical Skills

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

**Other Tools:** Git, L<sup>A</sup>T<sub>E</sub>X, 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

## Relevant Coursework

Theory of Computation\*, Operating Systems\*, Data Structures And Algorithms, Algorithms\*, Computing Laboratory, Computer Organization, Probability And Statistics, Fundamentals of Computing, Linear Algebra, Discrete Mathematics

## Position of Responsibility

- ECDC Coordinator, Techkriti'14
  - Successfully organised four events with an overall participation of over 500 participants
- Secretary of Electronics Club
  - Organized hall level workshops and worked in a team to organize a hall level competition
  - Guided and mentored the students on different projects and competitions
- Secretary of Public Relations, Antaragni'13
  - Ensured a smooth conduct of all the events organized under the Public Relations
  - Managed the hospitality of the esteemed judges throughout the events