# SHASHANK BHUSHAN

Third Year Undergraduate Mechanical Engineering Email ID: **skbhu@iitk.ac.in** Mobile No: +91-7754915990

Address: Room No. 276, Hall of Residence 3, IIT Kanpur, Uttar Pradesh



## **INTERESTS**

Startups & Entrepreneurship, Android Development, Graphics Designing, Data Structures & Algorithms

#### **EDUCATION**

Year	Degree	Institute	CPI/%
2017(expected)	Bachelor of Technology	Indian Institute of Technology Kanpur	5.7*/10.0
2012	All India Senior School Certificate Examination (CBSE)	Shiv Jyoti , Kota	73.4 %
2010	Indian Certificate of Secondary Education (ICSE)	Don Bosco Academy, Patna	82 %

\* - at the end of fourth semester

### ACADEMIC ACHIEVEMENTS

• Secured All India Rank 3429 in JEE Advanced out of more than 500,000 aspirants.

2013

• Secured a score of 265/360 in JEE Mains given by around 1,300,000 students.

2013

• Secured a score of 382/450 in BITS Entrance Exam.

2013

### **WORK EXPERIENCE**

### CRANKOUT TECH PVT LTD | Android App Development Intern

(May 2015-Jul 2015)

## Book Any Gym, Studio, Sports venue or personal Health Coach in Mumbai.(CrankOut App)

- Created a minimalistic flow and paid special attention to user experience, made booking easy enough so that any person can fluently use all the services.
- Implemented Session Management, Cart Management and Material Design guidelines.

### **PROJECTS**

## AURAPLAY - AN ARTICULATED MECHANICAL ROBOTIC ARM | Electronics Club Project

(May 2014-Jun 2014)

- Making a Fluid Interface controlled by laser pen which is a projected screen. (Project Video Link)
- Using OpenCV to track screen through contour detection and mouse handling trough laser. Using this mouse you can move screen any place on a table top.
- Servo motors and Arduino was used to make the 2DOF movement of the robotic arm using wiring pi libraries.

## TA202 | Course Project under Prof. V.K. Jain

(Jan 2015-Apr 2015)

- A Fully Functional Automatic wheat plant sowing machine was made by a group of 6 people and was awarded as the best project from the whole batch of 440 students.
- The mechanism was designed such that the whole machine could be driven from a single point's motion . (Project Video Link)
- Using Matlab stimulation to calculated the trajectory of the end points in a 4 bar mechanism to make picking effective.

## TA201 | Course Project under Prof. Shashank Shekhar

(Aug 2014-Nov 2014)

- · Made a model to demonstrate the Perpetual Motion, and hence demonstrate the first and second law of thermodynamics.
- · Using Manufacturing processes with careful precision like welding, molding etc to make a wheels with attached bars to it.

### LINE FOLLOWING ROBOT | A seven sensor PID line Following bot | Takneek ( IITK Intra college Techfest)

(Aug 2014

• Made a black line following robot using a seven sensor array , and working with arduino to programme it to implement Proportional – Integral – Derivative(PID) for smooth following.

## **TECHNICAL SKILLS**

• Programming Languages: C, C++, JavaScript

• Web Development : HTML, CSS, Django, Node.js, Bootstrap.css, MongoDB

• Utilities & Softwares : Git, Make, Bash, Postman, Microsoft Excel, Microsoft PowerPoint

• Operating Systems : Fedora, Ubuntu, Mac OS, Windows

• Design Software : Sketch(Mac), Auto-cad, Solidworks Autodesk Inventor, Adobe Illustrator, Adobe Photoshop

## RELEVANT COURSEWORK

Mechanical Engg.: Engineering Design and Graphics, Nature and Properties of Material, Fluid Mechanics, Graphical Engineering,

Manufacturing Processes, Dynamics\*, Mechanics Of Solids\*, Energy Systems\*

Manufacturing Science and Technology\*,

Others : Fundamentals of Computing, Complex Variables , Introduction to Electrical Engineering,

Partial Differential Equations, Introduction to Electronics, Flight Mechanics\*

(\* - ongoing)

## **LEADERSHIP SKILLS**

## **CULTURAL SECRETARY | Hall Executive Committee, Hall 3**

(Jul 2014-Apr 2015)

- Was part of a team of 11 people who managed all the Hall level Activities and supervised inter as well as intra-hall events.
- Won the Galaxy trophy for the 7th time in a row which is IITK's inter-hall cultural Festival.
- Invented a programme through which every new resident of the hall could get full exposure to cultural activities.

## COORDINATOR - INFORMALS, TECHKRITI'15 (Technical and Entrepreneurship Festival of IIT Kanpur)

- · Organised and Invented Ideas for Fun Games which was open to all present in the Techkriti.
- As well as secured the online points portal from being hacked.

## COORDINATOR - DESIGN EVENTS, TECHKRITI'15

(Mar 2015)

(Mar 2015)

- Conducted the competitions of Techkriti grand prix and Concantenate in our technical fest which included bringing
  partications from over India
- Emphasised on post festival logistics management reduce the lead time from 5 months to 2 months.

### SECRETARY ELEVATOR PITCH - BUISENESS EVENTS, TECHKRITI'14

(Mar 2014)

• Managed the Operations of event and Conducted it and won a price for participation as an audience.

## **HOBBIES**

Staying Updated with Technical Entrepreneur Events, Traveling, Management of Events, Cooking