



# ENTREPRANA|2018

*“Predicting Rain doesn’t count.  
Building arks does.”*

- Warren Buffett

**AT FIRST THEY  
WILL ASK WHY  
YOU'RE  
DOING IT.  
LATER THEY'LL  
ASK HOW  
YOU DID IT.**



**ENTREPRENEURSHIP CELL  
INSTITUTE OF ENGINEERING & MANAGEMENT, KOLKATA**

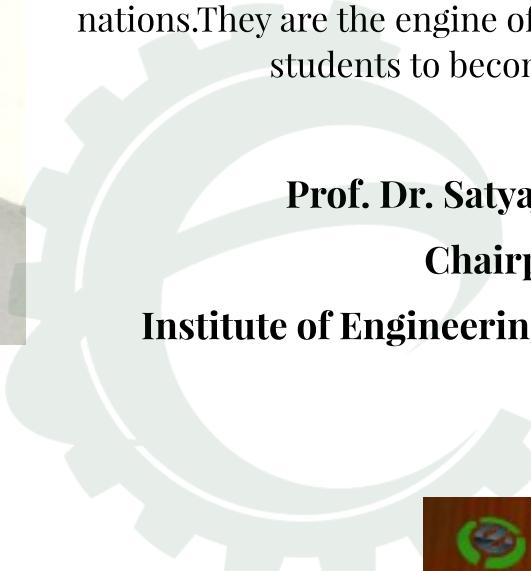
presents

**ENTREPRANA  
2017-2018**

# Words from The Desk...



From childhood we face our parents, who always tell us to study hard, so that we can climb the corporate ladder and shine in life. We want to encourage our students to OWN this corporate ladder so that others can climb it and our students can be rich. Entrepreneurs create jobs for people and build nations. They are the engine of growth. IEM encourages all its students to become entrepreneurs.



**Prof. Dr. Satyajit Chakrabarti**  
**Chairperson,**  
**Institute of Engineering & Management Group**

An entrepreneur starts off with the thought of converting dreams and ideas into actions, making ends meet, goes on to generate employment for others, and in the process gains freedom, profit, realization of dreams as returns for all his effort. The thrill of the challenge and the freedom to work is what drives an entrepreneur.

**Prof. Satyajit Chakrabarti**  
**Director,**  
**Institute OF Engineering & Management**



Instead of being a simply self-employed or job creator, entrepreneurs must concentrate on continuous innovation and turn it to a high growth company. Entrepreneurs always ready to face new challenges and never worry about failure. In Institute of Engineering and Management we encourage each student to be an entrepreneur. My best wishes are always there with the Young Entrepreneurs of IEM.

**Prof. Dr. Amlan Kusum Nayak  
Principal,  
Institute OF Engineering & Management**



The first and foremost quality which an entrepreneur should possess is endurance. He should have the ability to go on and on despite repeated failures and taking it as an important lesson which life has taught him or her. The person has an innate confidence in his potential and does not get deterred by the innumerable obstacles life throws at him or her. I feel my role as an IEM E Cell faculty president to merely rekindle the ember of entrepreneurship within you all hoping that it will turn into a raging flame.

**Prof. Avijit Bose  
Chairperson & Chief Editor,  
IEM E-CELL**



2015- the year I started as a volunteer in Eweek being inspired by the seniors, my journey gradually took me to be the student head of events and HR and then lead me to become the President of Entrepreneurship Cell.

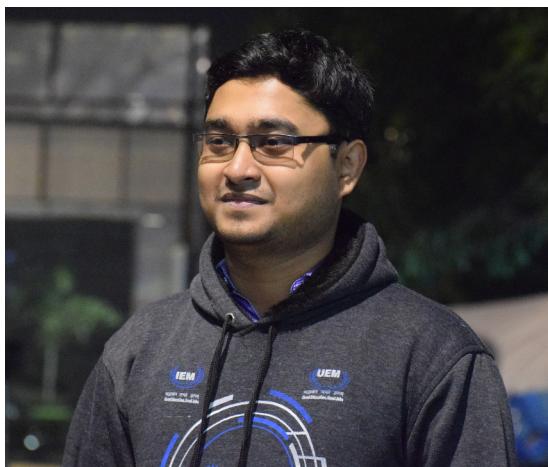
In my last year , as VC when I look back I see young people getting inspired more and more through the interactive sessions with different Entrepreneurs organised by our E Cell.I see a rapid growth of Startup Culture on our campus. This has only been possible due to the efforts put in by the entire E Cell team. I would like to thank my seniors and my team for supporting me throughout.

**Sumanjit Chowdhury**  
**Chief Executive Officer**  
**IEM E-Cell**

Today, though the entrepreneurial culture is booming across India, a huge number of people are still apprehensive about it. IEM E-Cell is very active in doing its part in helping the budding entrepreneurs realize their dreams, despite such apprehensions.

Being a part of the E-Cell has been an amazing journey that has helped me become a better version of myself by nurturing my leadership skills and organisation abilities and has made me capable enough to handle any curveball that life throws at them. The people I've met here will always remain an important part of my life and the memories I've made here are something I'll definitely cherish forever.

**Ajanta Dasgupta**  
**President**  
**IEM E-Cell**



The Entrepreneurial culture has come a long way in the last few years.IEM E-Cell is one such organisation that motivates and guides the budding entrepreneurs towards a path of success.

IEM E-Cell has helped me improve my leadership skills and communication skills and has taught me to face any challenge in a calm and dignified manner.It is no more just a college body, but has become a family. The people I've met here are the ones who would always remain close to my heart and the experiences I've had here are something I would keep with me for the rest of my life.

**Sayantan Nandy**  
**President**  
**IEM E-Cell**

# From the Editor's Desk ...

It was an honour to have been asked to be the Editorial Head of the Magazine team.

That being the Editor of a magazine could involve so many different aspects was something unknown to me back then. For months, I was floundering about, without a clue how to get this gigantic task done.

There were months of missed deadlines, a plethora of new things that had to be learnt, minute errors to find and correct, choices to make and decisions to take. Being a part of the magazine was a daunting, yet enjoyable affair.

Kudos to my fantastic team of incomparable talent, comprising Ajanta Dasgupta, Siddharth Jha, Adrija Bandyopadhyay, Soutrik Roy and Soumik Dey.

Thank you for helping me turn something I had always wanted to do, into something we actually did. Thank you for giving me a venture so wonderful to look back on.

A special shoutout to Sweta Malhotra, Rohan Mark Gomes, Geetanjan Roy, Abhirup Das, Meghna Bharadwaj and Dibyadeep Bhattacharya for their invaluable help.

I would also like to thank Professor Avijit Bose for his constant support.

This magazine was something we all enjoyed working on, and nothing could be a better reward than our readers enjoying it too.

**Sanjana Jha**

**Head of Editorial Team**

**IEM E-Cell**



# The Editorial Team



Ajanta Dasgupta



Siddharth Jha



Adrija Bandyopadhyay



Sweta Malhotra

Geetanjan Roy

Riyanka Saha



Abhirup Das

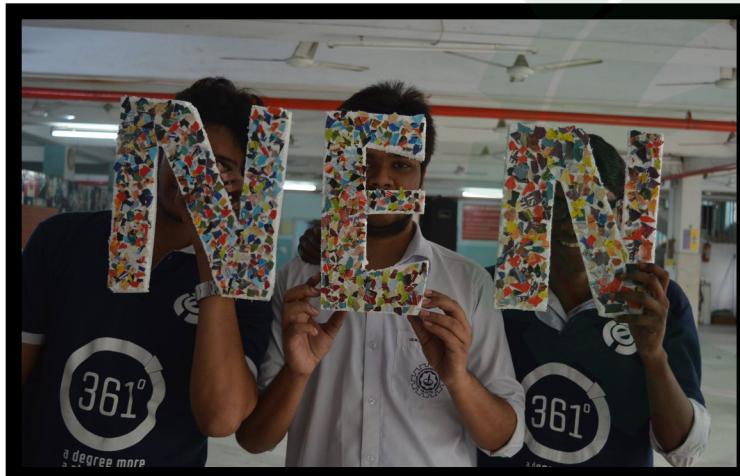


Meghna Bharadwaj



Dibyadeep Bhattacharya

# Memories of a Lifetime ....







# About IEM

The Institute of Engineering and Management, is one of the premier, privately funded techno-management schools located in West Bengal, India. It was founded in 1989 and this makes it the oldest private engineering school in the province. The institute has a rich past in the fields of excellence and always strives to achieve it in all circumstances.

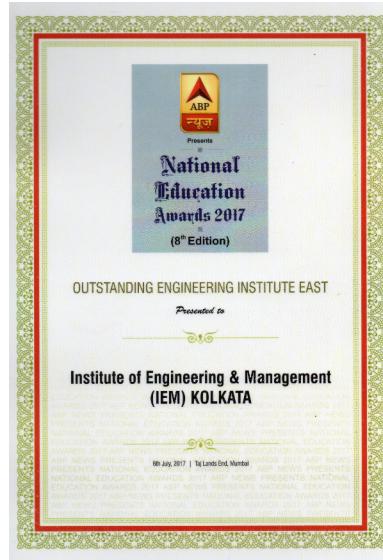
It states its vision to be globally recognized as an educational institute for outcome-based education and application-oriented research and hence to that end has opened doors for young minds who "dare to dream". The Institute constantly tries to assist students to understand and enjoy seamless nature of knowledge and encourage them to apply it to practical use, so as to become worthy, socially responsible human beings sought after for their leadership skills. Thus it is constantly striving to inspire its students to be creative and innovative, and in keeping itself upgraded in terms of manpower, infrastructure and use of latest technological tools.

In order to make sure that its students can stand out from the rest on a global level, IEM has also set up a number of clubs and student bodies( Entrepreneurship Cell, Placement Cell etc.) which work tirelessly, cooperating with and assisting the students who come up with ideas to be implemented socially. It organizes renowned fests, industry visits, international conferences, student exchange programs and various other industry-oriented activities, workshops, etc. on a regular basis thereby ensuring its students are always at par with industry standards. The laboratories are equipped with state of the art equipment which are accessible to its students for relentless development of new ideas and products. In addition there is a separate lab, the IEDC Lab, for the sole purpose of research work and innovation. Because of this consistent performance IEM has been awarded many prestigious awards, a few of which are listed below:

1. Accredited prestigious Grade A by NAAC (National Assessment and Accreditation Council).
2. Ranked as the 3rd best engineering college in West Bengal after IIT Kharagpur and NIT Durgapur and 79th across all India (National Institutional Ranking Framework), Ministry of HRD, Govt. of India, 2016.
3. Best Private engineering College in West Bengal, Jewel of the East, Careergraph- Telegraph, 2009.
4. Rated as Silver+++ Business School- "Just Careers" Magazine, 2011.
5. Champions East- NEN (National Entrepreneurship Network) E-Week, 2011-2016.

It is evident from these achievements that IEM has always tried to stand out from the crowd and it is expected that they will reach even greater heights of success in the coming years.

# Awards & Achievements



# IEM E-Cell

***“WE MAKE MEANING, NOT MARKETING”***

The Entrepreneurship-Cell of IEM has its origins in 2007 and ever since then, it has had the sole objective of guiding and inspiring students in the field of innovations, inventions and entrepreneurship. It acts as an arena to exhibit the creativity, entrepreneurship skills and talent of students in varied dimensions of technology and management. The concept of E-Cell was envisioned as a platform for providing help and correct resources to guide budding entrepreneurs onto the right path. The IEM E-Cell has been a major breakthrough in the history of this institute, providing the students encouragement and a platform to create their own start-ups.

Some of the major objectives of this cell include developing leadership qualities among students, motivating them to bring up feasible and practical business plans, helping bridge the gap between industry and academics, and developing a strong network of entrepreneurs, venture capitalists, and corporate executives.

In order to get the best out of the budding entrepreneurs IEM E-Cell wastes no time at all and constantly provides multiple opportunities to them to realize their dreams and implement them practically. The organization operates according to the most current regulations and policies of the National Entrepreneurship Network, in compliance with all local, state, and national laws. It also groups together like minded people to share ideas or opinions on how to start a business and then ensuring that the dream is converted into reality. A few of the activities conducted by the E-Cell are:

- I. Training Initiatives undertaken by NEN in collaboration with Wadhwani Foundation.**
- II. Panel discussions round the year so that students can interact with eminent personalities who have excelled in their own fields starting from a common point.**
- III. Conducting workshops and seminars (eg: CII Conclave)**
- IV. Social activities like blood donation camps, charity drive, planting trees and teaching underprivileged children.**
- V. Encouraging women to take up entrepreneurship and thus empowering them to act independently.**



# History and Achievements of IEM E-Cell

It is hard to even imagine that a body as active and supportive as the IEM E-Cell would go on without any success or achievements. Thus, it seems imperative to mention some of their biggest success stories in the past.

- 1. IEM E-Cell actively participates in the E-Week campaign organized by NEN each year and has a proud legacy of being the champions in the years of 2009, 2010, 2013, 2014, 2015 and runners-up in 2008 and 2012. It has also been awarded the Social Media Champ Award in the year 2016.**
- 2. IEM E-Cell, in collaboration with Wadhwani Foundation, organized a first of its kind E-Camp in 2018 which reached out to an audience from premier institutes like IIT Kharagpur, Jadavpur University, St. Xavier's etc.**
- 3. It has been the launch pad for a number of business ventures. Distronix, Renderbit, Krafty Chocolates, Café Bong Binge, Bookbazar, XCLence Corp, Image Array, Wicked Algo, Firaziza, Eclat, Help U, BHT Exports, SAHAS, Blue Hill Technologies and Hackcieux are a few of them which deserve special mention.**
- 4. It has also successfully collaborated with: NEN, Wadhwani Foundation, CII, E-Cell Durgapur, E-Cell IIEST Shibpur.**

The IEM E-Cell has been decorated with a plethora of awards and achievements ever since its inception. However its greatest contribution till date would be the support and encouragement its staff and members extend to the promising entrepreneurs thereby ensuring that there is some sort of contribution from its end towards the success stories of all its victories. It surely seems that that IEM E-Cell is on its way to creating more memorable moments to cherish, and that its duties and work, far from being over, have just started to pick up the pace for a long race ahead.

# History of Innovation in IEM



A large, dense word cloud centered on innovation and business concepts. The words are arranged in a roughly circular pattern, with some words like 'innovate' and 'ideas' being larger and more prominent in red. Other words include 'teamwork', 'risk', 'inspiring', 'creative', 'solution', 'key', 'business', 'communication', 'performance', 'planning', 'works', 'concept', 'brand', 'brainstorm', 'plan', 'strategy', 'success', 'process', 'global', 'excellence', 'out of the box', 'reward', 'leadership', 'efficiency', 'workflow', 'information', 'marketing', 'best', 'organization', 'network', 'social', 'research', 'analysis', 'green', 'advertising', 'positive', 'refresh', 'vision', 'development', 'ads', and 'goals'. The background features a teal-to-white gradient at the bottom.



***“Innovation is the ability to see change as an opportunity, not a threat”-Steve Jobs.***

The contributions of an engineer can be described using just one word: innovation, which means applying skills to create technology that can change the world for the better. IEM seeks to give birth to engineers who can solve some of the most challenging problems of this age; by motivating youngsters to dream, think, apply their knowledge and invent, we ensure that these young minds have a better career. IEM provides a great platform for these young engineers of tomorrow to showcase their ideas, creations and also receive fundings, resources needed to bring their ideas to life.

The annual tech fest, *Innovación* is organised with this very goal in mind. Here students get a chance to exhibit projects to eminent guests from all industries through the *Innovare* event, from hardware solutions to latest endeavours like home automation and IoT, to use of software for face recognition, object detection, human surveillance, efficient eco-friendly energy supply, and robust security systems. One such invention to be proud of is a self-chargeable power bank, that uses random noise vibrations to charge cellular devices. Rahul Sharma, the founder of Distronix made contributions in form of an smart power distribution system, that intelligently chooses between different kinds of power supplies to provide efficient and eco-friendly energy solutions to industries. An intelligent surveillance and lighting system designed by a group of students was installed in the streets surrounding KMC headquarters in S.N.Banerjee Road, providing real time monitoring in case of traffic emergencies. A solution to prevent motorcycle accidents was also presented in the form of a strict and smart helmet that doesn't allow bikers to ride without it, as well as preventing its removal en route, thus also presenting a smart solution to bike-theft.

The Innovation Entrepreneurship and Development Centre(IEDC) Lab is another prominent part of IEM that works on new and exciting technologies year after year. The projects undertaken by students here are funded by the college. It is a prestigious part of the institution where students work on latest technologies like Augmented and Virtual Reality, Artificial Intelligence, Computer Vision, embedded systems, autonomous drones, etc. This platform provides a lot of valuable exposure that helps spur the inventor and creator within all students involved.

# **IEM-IEDC Innovations**

## **3-D Image Reconstruction**

This project helps to convert 2-D images of an object captured from an ordinary camera into a 3-D projection of the original model. The usage of this project is quite simple. First the object whose projection is to be prepared is located and then lots of pictures of that object are captured from all angles. It has to be kept in mind that more the number of images captured from a variety of positions, the more accurate is the final projection, though it also depends on the quality of the camera. Then these images are fed as input to the software which can be installed on any normal PC. The package makes use of three algorithms:-

1. Bundler - which performs sparse 3D reconstruction;
2. PMVS (patch multi view stereo) - that takes as input the sparse reconstruction resulted from running Bundler and produces a dense 3D reconstruction; and
3. CMVS (clustered multi view stereo) - which is faster and is used only when a lot of images have to be processed.

The reconstruction from the images takes some time depending on the quality of hardware available.

## **Air Mouse**

Project Air Mouse uses the webcam on the computer as the input device for the cursor movement. This webcam can be either the built-in primary webcam or any other secondary webcam which detects the face of the user and thus controls the cursor according to the movement of the head. The project does 3D head pose estimation from 2D images captured by a monocular camera. The head pose is used to control the mouse cursor. Facial landmark points are extracted from a real-time camera feed using a landmark predictor. Six specific points are chosen and mapped to a predefined model of a human head in 3D space to calculate the rotation and translation vectors which gives us the rotation of the head and repositions the cursor in real-time. Left and right clicks are simulated by left and right blinks respectively.

This approach makes it much more convenient to control the computer. The user can be involved in any other activity where he has to use both his hands and won't be able to use the mouse to control the computer, but now he can use it via head movements without having to use his hands. This when combined with devices having voice command functionality will make computers much more user-friendly. Moreover this will be a boon for disabled people while using computers.

## **Augmented Reality Switch**

Augmented Reality (AR) is a new technology which enhances our daily experience by adding virtual components to provide a new layer of attraction with the real world. In this project we have implemented the functionality of a switch with this piece of technology.

Normal switches have to be turned on manually and generally require switchboards so that they can be fitted on some surface. It's also important to ensure the safety of the users by hiding the naked wires in the circuitry. Another problem is that these conventional switches are not very portable due to the presence of the circuits underneath. But with our AR switch, we can operate an LED bulb. We have done this by taking the printout of a predetermined design on a white piece of paper. In order to turn on the LED, the user just has to focus the webcam on the paper and when the switch appears, he just has to bring his hand over the area where the switch appears and the LED turns on. To turn it off, the process is repeated.

This piece of technology can be used in home-automation. The entire house won't have any switches or switchboards. There will be pieces of paper (of some distinct design) on the walls in place of the switchboards. The user can focus his mobile camera on the paper. Then this data will be sent wirelessly to a processing unit which can be a normal PC, laptop or even a Raspberry Pi. The best part is that, only a single centralised device will be required for handling all the switches for an entire building. The pieces of paper can be conveniently positioned and moved from one place to another as and when required, thus solving the problem of portability.

## **CNC Plotter**

Computer numerical control (CNC) is the automation of machine tools by means of computers executing pre-programmed sequences of machine control commands. This is in contrast to machines that are manually controlled or mechanically automated.

In modern CNC systems, the design and manufacture of a mechanical part are highly automated. The part's mechanical dimensions are defined using computer-aided design (CAD) software, and then translated into manufacturing directives by computer-aided manufacturing (CAM) software. The resulting directives are transformed (by "post processor" software) into the specific commands necessary for a particular machine to produce the component, and then are loaded into the CNC machine.

Modern machines often combine multiple tools into a single "cell". In other installations, a number of different machines are used with an external controller and human or robotic operators that move the component from machine to machine. In either case, the series of steps needed to produce any part is highly automated and produces a part that closely matches the original CAD.

## Drones and Aeroplanes

An unmanned aerial vehicle (UAV), commonly known as a drone, is an aircraft without a human pilot aboard. UAVs are a component of an unmanned aircraft system (UAS), which includes a UAV, a ground-based controller, and a system of communications between the two. The flight of UAVs may operate with various degrees of autonomy: either under remote control by a human operator or autonomously by onboard computers.

While they originated in the military sector, their use is rapidly expanding to commercial, scientific, recreational, agricultural, and other applications, such as policing, peacekeeping, and surveillance, product deliveries, aerial photography, agriculture and drone racing. Civilian UAVs now vastly outnumber military UAVs, with estimates of over a million sold by 2015, so they can be seen as an early commercial application of autonomous things, to be followed by the autonomous car and home robots.

The hexacopter has 700kV Sunnysky v2814 motors; 4s 1000mAh lipo battery which is capable of another 4s 1200mAh lipo. The liftoff weight of the drone is 3.9kg with one lipo capable of an additional payload of upto 4kg. The maximum thrust of each motor at 100% throttle is 2300gm and the hovering throttle varies from 45% to 50%. The drone makes use of 12\*3.8 apc/cf propellers with dual GPS, 433MHz telemetry link, 5.8GHz video link, 2.4GHz controller link, dual compass, dual barometric sensor and a dual processor with one of them as a failsafe co-processor.

The aeroplane has x2216 1400kV motors and a 2200mAh 3s lipo battery. The main aim of this model is to increase the flight time and efficiency in order to cover long distances.

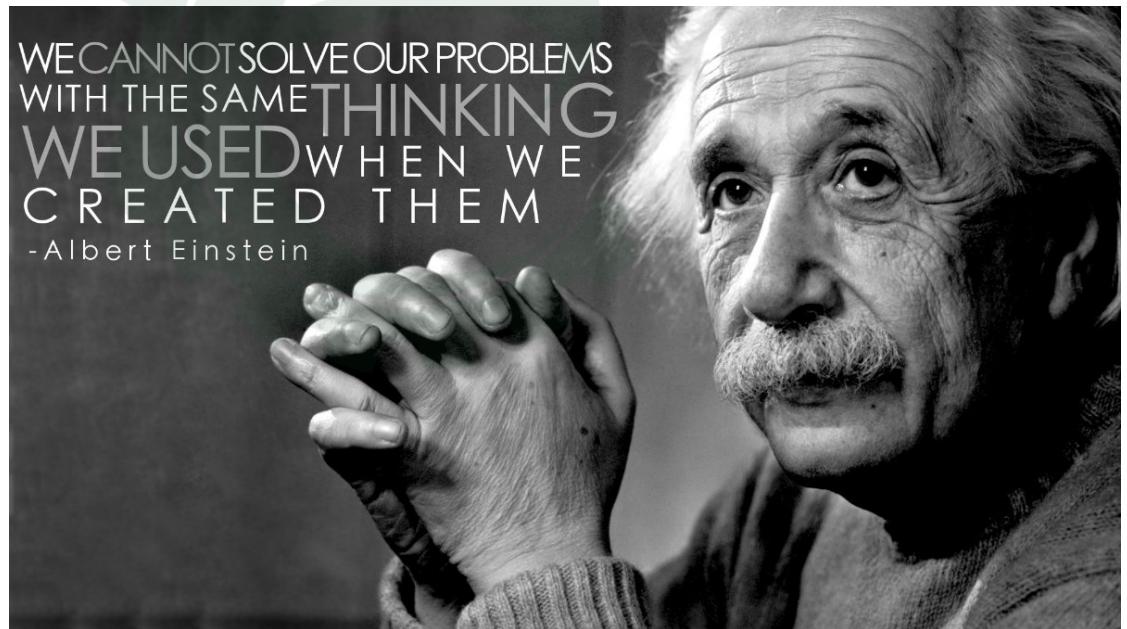
## Object Defect Detection

This project has put forward a mechanism where we can detect defective objects where the anomaly is visible clearly and separate it from the desirable objects. The current mechanism consists of a conveyor belt for carrying the objects, a webcam for scanning the objects, a push mechanism, a processing unit and an Arduino Uno to trigger the response. The apparatus currently distinguishes between red and green objects. The objects are conveyed by the conveyor belt and are scanned by a webcam which keeps scanning each object from above and is connected to a standalone computer for processing. The image captured by the webcam is thresholded, and if the object turns out to be red it is allowed to pass. If it turns out to be green, it is pushed aside by the pushing mechanism into a separate crate kept beside the conveyor belt, controlled by an Arduino Uno.

This apparatus can be used effectively in the factory for segregating defective items on a large-scale without human intervention. The defect detection can be highly customised and a more complex and problem-specific model can be implemented and trained to suit our purpose with the help of machine learning.

# Wifi Hackspot

This project aims to demonstrate how vulnerable our wifi networks and mobile hotspots are in today's digital world. With this program we can obtain the password of any wifi network. Since no heavy computations are required, we can use a Raspberry Pi for running the program for portability. In order to trap the password from a network, the program continuously sends de-authentication packets to the wifi network and thus disconnects all the devices connected to it. The program captures handshakes and then generates handshake files for that particular network. It then creates a malicious "evil twin" of that network with the same name, which is open, unlike the original network. The vulnerable user is tricked to connect to this twin network because he is continuously disconnected from the original network. So the user will now try to connect to the twin of that network which looks exactly identical to the original network. Now the interesting part is that he is duped to enter the correct password, the one which was set for the original network, on a web portal. The most efficient part of this system is that, the password he enters for this network is authenticated with the original one and hence incorrect passwords are not accepted. So the moment he enters the correct password and the authentication passes, the program captures the password which is the actual password of the original network!



# Innovare 2018

One of the major achievements of IEM E-Cell has been the successful organization of the event Innovare, wherein the bright young minds of the institute and from far afar, implement their dreams into reality via innovative projects. Like the erstwhile years, it was organized in 2018 as well and without a doubt was a huge success. Major interested companies had attended this event with the eagerness to fund the most exciting, and vivid projects, while all the participants were awarded with cash prizes to boost up their confidence and engage them in further project development work.

Countless such imaginative and innovative projects were presented at Innovare 2018, however there stood out a few which managed to attract the glances of one and many alike. Some of these deserve a special mention and are described below.

## **Motion Sensing Light/ Appliances**

**Team:**

**Novitech**

**Members:**

**Maitreyee Banerjee**

**Mayurakshi Paul**

**Ujjal Banik**

**Vaswati Kundu**

The project utilizes a PIR (Passive Infrared) sensor, equipped with Fresnel which focuses any infrared radiation present around it. Any sort of infrared radiation generated would be picked up by the sensor and a digital signal (1) is then sent to the Arduino, which switches on all the electrical appliances connected to its output pin as per the code given. Its uses include turning electrical devices on and off automatically without manual operation and as a security alarm, automatic door opener etc.

# Voice Controlled Robot with Arms Implementation

**Team:**

**VCR**

**Members:**

**Bibek Naha**

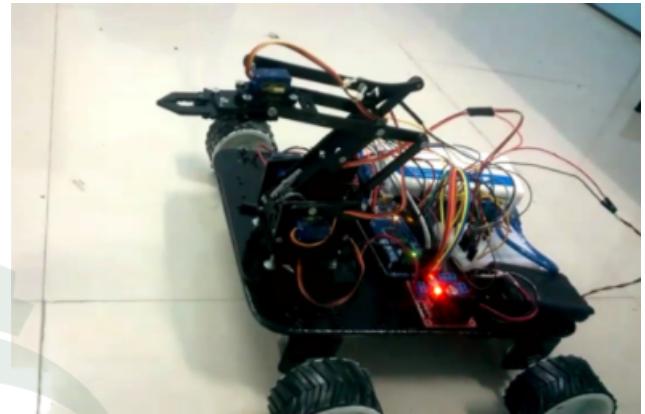
**Abhranil Basak**

**Debosmita Roy**

**Anindo S. Patwary**

This project is controlled via Bluetooth HC-05 through a smartphone app using Arduino. The app used is a self-made voice recognition app made by +IT app inventor and is developed in a way that it converts the voice command to text and transfers the text to the connected Bluetooth device. The Bluetooth on the Arduino board, on receiving the text from the app stores it as a string. There are pre-programmed words (move back, turn right, turn left, up receive, down receive etc. ) in the Arduino, so whenever the received text matches with the pre-programmed words, it executes the command assigned and hence controls the motor shield.

The developers are now heading towards an automated voice controlled robot with a single voice command which will work as per their control. They want to perform image processing which will help the bot to recognize a particular object and perform the desired job.



# **IOT Based Smart Energy Meter for Automatic Metering, Billing, Instant Alert with Power Saving Scheme**

## **Members:**

**Sayantan Maiti**

**Subhranil Maitra**

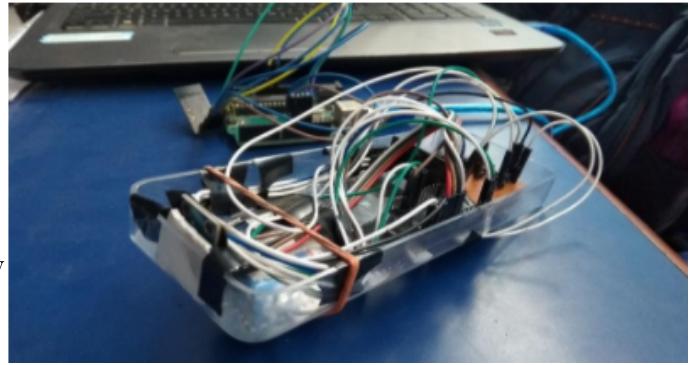
The objective is to generate bill automatically by checking the electricity unit's consumption in a house and in a way to reduce the manual labor. The project aims to make the energy meter smart by having a continuous automatic communication between the consumer's energy meter and the utility. This project can help in reducing energy consumption in house as the owner is continuously being notified about the number of units that are consumed. The energy meter reading is communicated to the utility and to the consumer via internet. The project is based on pay-as-you-go model which is analogous to that of prepaid mobile recharge. The recharge is made through the SMS facility of consumer's mobile phone. The recharged amount will be cut down as per the conventional price rate and will be continuously updated to the consumer by the LCD connected to the controller. A warning text message is sent to the consumer's registered mobile number at threshold balance prior to the balance getting nil. Threshold balance depends on the rate of usage of power and can be set by the user as per his convenience. It can also disconnect the home power supply connection, if there is low or zero balance in the system. The buyer needs to pay for the usage of electricity on schedule, in case that he couldn't pay, the electricity transmission can be turned off autonomously from the distant server. The user can monitor the energy consumption in units from a web page from PC/mobile. Theft detection unit connected to energy meter will notify the company when meter tampering occurs in energy meter and it will send theft detect information through SIM900 modem and theft detected will be displayed on the terminal window of the company side. Wi-Fi unit performs the IoT operation by sending energy meter data to web page/server which can be accessed through an Android application and web-browser. Also, loads can be controlled by both GSM through normal SMS and Wi-Fi through an app. And when theft alert is detected, it will turn off main relay and report to web server/Adafruit mqtt channel/Thingspeak server. The calculations are performed automatically and the bill is mailed to the subscriber. The bill amount can be checked by the owner anywhere globally.

# **Gesture Controlled Voice**

**Team:**

**Anonymice**

Gesture Recognition enables human to communicate naturally with machines. For a certain section of humans,



those who are unable to talk or hear, the only mode of communication is through sign language or gestures. However such signs are not always understood by common people. Here is a portable system to recognize the gestures made by motion of a remote device in air and effectively interpret the same to generate speech. This device contains tri-axis accelerometer motion sensor, microcontroller and wireless technology. The 3-axis data of the sensor is sent wirelessly through NRF to the processor when the user makes the gesture. The data is now interpolated and fed to SVM and regression algorithms of machine learning for training. Later when the same gesture is made the system predicts the word and gives the associated speech as output.

# Smart Automation

**Team:**  
**PASACionates**

The project aims to use automation in the upcoming generations where we can lessen the work of manpower using these 4 models:

**A: AUTOMATED STREET LIGHTS SYSTEM:** In this the team has used LDR which senses the intensity of light. When the intensity of light goes above the threshold value, the LDR acts as a resistor and does not allow the current to flow and let the bulb glow and when the intensity goes below the threshold, it stops acting as a resistor and allow the bulbs to glow. Thus in this, they have focused on two factors. Firstly, it reduces the wastes of electricity in the daytime and secondly, we don't need to assign any person to make the switching.

**B: SMART DUSTBIN:** In this they have made use of the ultrasonic sensors which detects the presence of a physical body. So basically whenever a person comes in between the radar of the sensor, it sends the signal to the servo motor which allows the lid of the dustbin to open. Thus in this, one does not need to use his hands to open the dustbin lids.

**C: LASER SECURITY SYSTEM:** In this they have made use of an LDR along with the laser light. They are kept parallel to each other and whenever there comes any obstructions in between the connection, the buzzers starts to beep and sends the alert signal. Thus in designing this, the developers have kept in mind restricted areas like crime scenes and precious models display where people are not allowed. It could even be in houses near electrical appliances to restrict small children to go near those places.

**D: AUTOMATED RAIL GATE SYSTEM:** In this the members have used the ultrasonic sensor which detects physical bodies near the rail tracks so that the rail gate closes on its own. To confirm the ultrasonic sensor about the presence of train, they have introduced a load shell which determines the exact amount of weight of the train and close the rail gate.

Thus in this they have used automation and therefore don't need any individuals to sit and close the rail gates.

# **GYAANI- An Artificial Intelligence Based System**

**Team:**

**GYAANI**

**Members:**

**Rohan Dutta**

**Subhayan Nath**

**Samadrita Ganguly**

The objective of this project is to develop an artificial intelligence based system called GYAANI that supports a wide array of functionality. It has a voice based command interface where it converts speech input from a dedicated microphone and converts it to text using speech recognition module. The core of Artificial Intelligence is implemented using the AIML language and detects phrases and patterns in our commands and using its processing ability performs specific task. We have added a functionality of virtual tele-presence system using VR Headset.

## **Voice Controlled Home Automation System**

**Team:**

**Psycho Inventors**

**Members:**

**Malhar Chakraborty**

**Sayor Chatterjee**

**Prakash Ranjan Chakraborty**

This is a cheap home automation system which is voice operated, it can control AC appliances using voice(Google Voice Recognition Engine)through any android smartphone. Extremely cheap - To control 4 AC appliances in a room, the price will be around 900/- rupees. For this reason most of the people in India can afford it. Some extra features are:

**Offline Mode:** - this thing can be used offline without any internet connection. (Using Google offline mode even in low voice detection accuracy).

**Totally Calibrate-able:** - The system can be calibrated according to the speaking tone and pronunciation of the user...

**Good Social Impact:** - Saves a lot of energy.

Future Plans include looking forward to use a Wi-Fi or a GSM module to control the appliances remotely through internet or SMS respectively and improving the code more to increasing the accuracy when in offline mode.

# Arduino Surveillance and Defense System

**Team:**

Irithyll

**Member:**

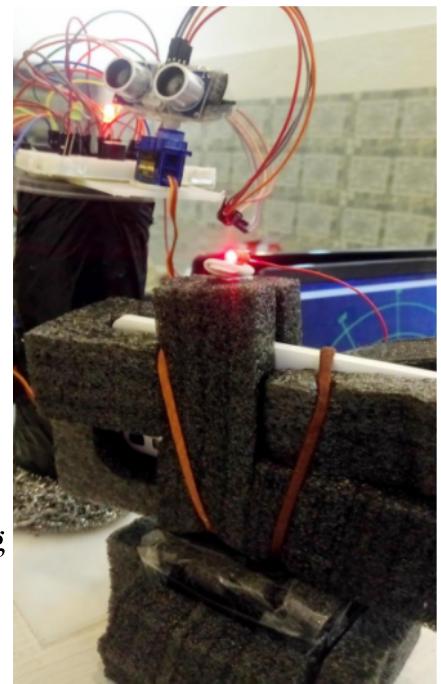
Prateeti Mukherjee

The system is divided into two specific functionalities:

**SURVEILLANCE:** The ultrasonic sensor does this. It scans its surroundings and feeds input for radar display. A green LED is on during normal functioning.

**DEFENSE:** Once an invader is detected, the sensor sends warning signals, a red LED blinks, and a buzzer is set off. The position and

angle of the invader is displayed on the screen. A laser, mounted on a camera module, immediately positions itself to shoot the target continuously, until the invader is down. Simultaneously, the surveillance camera sends live footage of invasion to the security personnel's phone or computer screen.



All in all the event Innovare was a huge success for IEM E-Cell. It was indeed a visual extravaganza for the tech-savvy people and showcased some of the brightest minds in our institute and from outside. Now, Innovare surely looks forward to greater participation in the years to come and witness even more exciting and breath-taking projects.

# History of Entrepreneurship in IEM...



## ***"Ideas are easy. Implementation is hard." -Guy Kawasaki***

The word ‘entrepreneurship’ stems from the French word "entreprendre", which means to begin, to undertake some task. It is true that ideas are important, but they are of no use unless implemented. The knowledge, skill, perseverance required to implement these ideas is what defines an engineer and an innovator. The above assets, plus drive, courage, motivation and business acumen is what defines an entrepreneur. With the upward surge in the number of college startups in recent years, IEM has also kept up with the times, inspiring and motivating students to take a bold step into this world. Through a significant number of events and workshops, and the presence of the Entrepreneurship Cell behind the scenes, undergrads today are getting the courage to launch their own startups and businesses centred around bringing in India the change that they dream of.

Founded in 2007, the E-Cell takes the responsibility of providing the right kind of resources, education, mentorships, and workshops, so that budding entrepreneurs can come up with feasible and practical business plans. Our strong network of employers, venture capitalists, corporate executives, senior professionals helps us in our consistent effort to make the students' dreams a reality. With tie-ups and collaborations with the organizations like the Wadhwani Foundation, IEM launched the National E-Camp for providing proper exposure to students. Our annual tech-fest, Innovacion also has events like Eureka focusing on business planning, and gaining funding for building innovative projects.

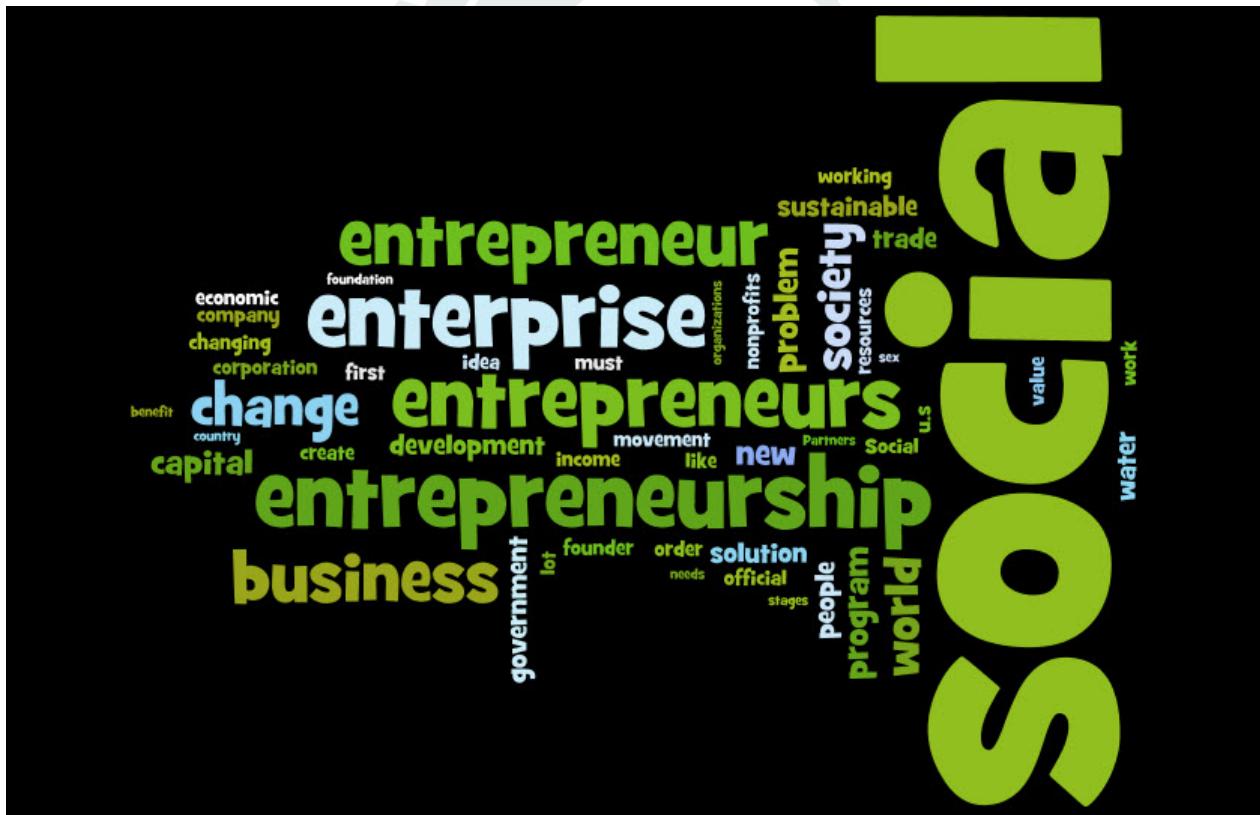
Among the list of alumni and senior-year students, there are quite a few startups. One worth mentioning is the Distronix group. It dreams about bringing in India the IoT revolution, and specializes in embedded system technologies, robotics, as well as organises tutorials and workshops in robotics. Krafty Chocolates is a dessert parlor owned by IEM graduates. Renderbit is a startup focusing on designing better websites for companies.

IEM has also been the winner of the NEN E-Week, which is one of the largest entrepreneurship activities in the country. Our college stands as the venue for many exciting events during this week, where a lot of students exhibit skills and technical proficiency via scientific models, innovative business plans, debates, quizzes and the like.

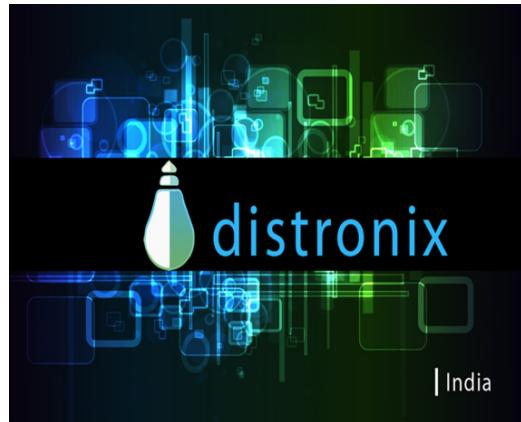
# Alumni Start-ups

IEM has always encouraged the dawn of new ideas and has promoted a huge number of bright minds to pursue their vision. IEM has always been an integral part in the success of its students and has taken up major steps like providing around 50 cubicles to students having start-up ideas so that they can nurture and nourish their ideas in a hassle-free environment with the help of professionals and technical experts. Their faith in the new-comers has given those new minds a platform to experiment and prove their worth. New ideas will always have a place and IEM provides a hassle-free environment to sharpen their skills by proper polishing in the hands of market and technical experts before venturing in the cut-throat market so that their in-experience does not cost them their place in the market today who the college believes if allowed to grow would result in immense betterment of both, the society as well as the corporate world. Help will always be given at IEM to those who truly deserve it.

The following pages list a few of the many start-ups by illustrious IEM alumni.



# Distronix



**DISTRONIX** was conceptualized by students of IEM who wanted to explore the sector of engineering which had a lot of potential. However, the way seemed very limited. They started off as solution providers to real life problems by getting into basic electronic system designs at an early stage. It has been 5 years that they had dreamt of a start-up, where they could devise solutions while catering to the right problems, especially in a country like India, where most solutions are based on foreign companies. They dreamt of developing embedded systems and IOT(Internet of Things) solutions on their own to create a system of engineering sector that would in future have a great global impact. They have not limited their work to software but have ventured into hardware designs for customized solutions.

Distronix has been a major partner of IEM and they often hold workshops at IEM campus. The training is on embedded systems where students learn the mechanical, electronics and the programming part of making a robot. They also get to experience the feel of operating a real life robot and thereby strengthens the interest of the technical students and also to some extent bridge the gap between the college life and the corporate life.

This not only helps Distronix spread its horizon but in turn it helps its students learn more about their options which they can pursue.



Rohit Sarkar, Co-founder

# Renderbit

**RENDERBIT** is a company that prides itself in ‘Doing more with less’. RENDERBIT Technologies has opened a new chapter in the book of start-ups. They take pride in being a complete end-to-end web presence provider—from websites and mobile apps to branding, content search engine optimization and forming an inclusive web strategy that brings our product or service to the online spotlight. They help build your future by improving your presence in the ‘World Wide Web’.

From time to time, they also build some cool projects of their own like:

- Garbage collector
- One Wallet Hub
- Inscribeedu

They are among the top 25 student start-ups of the year 2016, one of the national finalists of GSEA 2015 and has featured in many editions of ‘Your story’. Finally they take great pride in completing their work with extremely satisfied clients.

‘Constantly delivers above expectation’ was remarked by many of their clients about their performance.

They have customized CMS in accordance with the institutional requirements. The website can easily handle extensive traffic and scale accordingly. It facilitates mobile responses, open mega menus on mobile device with ease.

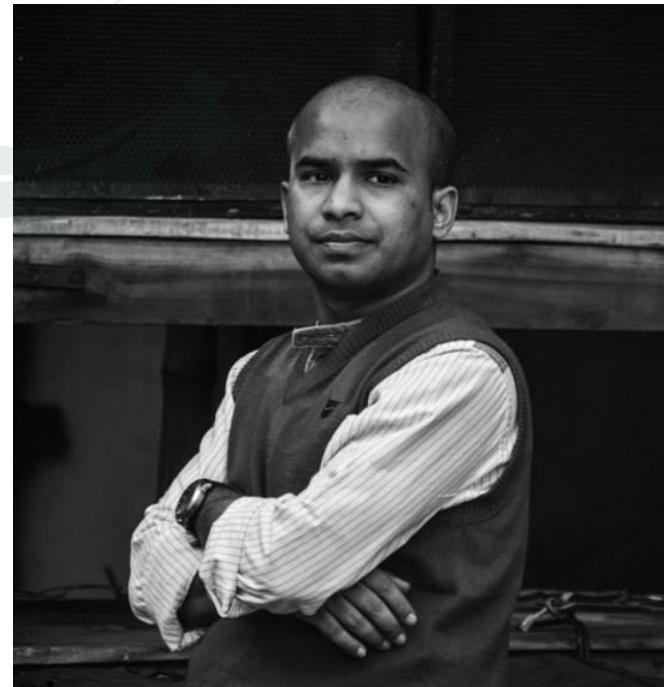


Soham Banerjee and Shreya Pramanik, founders, Renderbit

# Image Array



The smile on a face, the flap of wings, the freezing of motion, the hidden beauty of an object, the beautiful colors of pretty attires and all the rest of the small, wonderful spaces in time are captured through their lenses. They try to lock the time and light of Mother Earth in a rectangle or square for your collections on your precious walls and albums. We are talking about none other than **IMAGE ARRAY**, once again an idea conceptualized by the students of IEM.



**Arif Aziz, Founder**

## AlienBrains



### ALIEN BRAINS

**Alien Brains** is a research lab that focuses on turning dream ideas into real projects. Their aim is to build a team of passionate innovators who can either take part in ongoing developments of a product or they can start a new line of a product under the guidance of some really cool mentors.

The lab runs on the belief that the human brain has no bound to what it can learn or what it can achieve, limited only by the ifs and buts created by the other human brains around them. Such is the influence on most of them, that their own brain at times becomes alien to them and they forget who they really are and who they can really be few years down the line. The potential of human brain is assumed to be infinite and so is that of computers'. It is time to unleash the true capabilities of your brain to create something innovative as well as disruptive in the market.

There is a dearth of entrepreneurship showcase opportunities and guidance as well as a lack of internships or placement opportunities available to a large segment of the students' community. Every MNC of today wants a well-skilled professional with a good knowledge base. Through their training program, not only will the students get to embrace their inner calling, a handful of them will also get the opportunity to intern there. The lab, by its unique training program, aims to target those minds and help them broaden their mindsets and explore their virtual future. They are open to both school and college students who have ideas and creativity and the potential to "tech" it to the future.

**Praveen Baheti, Founder**



# HackCieux



**HackCieux** is an IT Risk Assessment and Digital Security Services provider company, founded by student of IEM, Kolkata (2016 batch). It's a trusted standard for companies that need to protect their brands, businesses and dignity from debilitating cyber-attacks. HackCieux build and deliver information security platforms and services, both generic and customized to pro-actively secure, continuously monitor and reactively respond to cyber threats to organisation's technology stack. Objective of HackCieux is quantify digital risk to inculcate a knowledge-based culture of safe and secure use of technology, such that risk becomes an informed business decision leading to minimal disruptions to business and life of corporate world.

HackCieux haven't limited their work by only making digital India secure, they have started building highly secured web-application and a very special web based automated penetration platform.

HackCieux has been a major partner of IEM-UEM group and they often hold workshops for students of IEM-UEM. Students come to know about the latest digital threats and how to secure their own digital life through these workshops. They have trained more than 1500 students at IEM-UEM campus. Also, they provide special training and internship program for the students of IEM-UEM group.

**Parthajit Dholey, Founder**



# Krafty Chocolates



**Krafty Chocolates** is a new venture, started by certain creative and enthusiastic ex-students of IEM, who wanted to start a business that would bring people together. They make delicious chocolates from scratch, with their own hands, and sell them at affordable prices. They attempt to bring a home made wholesomeness to their chocolates. They introduce a variety of creative innovations to their chocolates, from Whatsapp emojis to cute animal shapes. They also offer a variety of attractive gift packs-ranging from pretty gift boxes loaded with chocolates, to decorated baskets containing customized chocolate bars, and one can choose from a wide range of flavours - blueberry truffle, rum, mix berry, chocolate almond, cinnamon, etc.

**Pradyumna Chatterjee, Founder**





We, at IEM E-Cell, are honoured to have been able to meet, interact, and come into contact with amazing personalities and erudite individuals. Edited excerpts:

## Shobha Bondre

Author



'..Businessmen are the real heroes of the world..'

***If not a writer what would you have become?***

I had interests in many fields. I could have become a dancer or a theatre person. However, eventually, I realized that being a writer is what I want to be, and so I decided to channelize my entire concentration into only one stream. I had already published 3 books by then and had got considerable acceptance from the audience. This encouraged me to write more. I was anchoring shows on Doordarshan and writing scripts for TV series. Being a humanities student, I tried different forms of writing, but I enjoyed the commerce genre the most.

***What has inspired you to pursue writing about business strategy and economics ?***

I was always fascinated by success stories of businessmen. Businessmen are the real heroes of the world. They really change our lives, make them better, easier and happier by means of their creations. I like making personality profiles of big industrialists, and to do so I read magazines, short stories and novels about them. My book "Dhanda" talks about the unique sense of business Gujaratis have. Such profiles help me understand the world of the businessmen better.

***Why write in Marathi? Why not in a more universal language like English?***

Marathi is a language I grew up in and I express in Marathi better. Business in India seems to be better expressed in a regional language than any other.

***What qualities, according to you should a budding entrepreneur possess ?***

To be a successful entrepreneur one must have an out of the box idea. If you do not have something new, the market will hardly ever appreciate or acknowledge you. I believe a successful businessman has different blood in his body. He is filled with energy, is optimistic yet practical, extremely knowledgeable and determined to succeed. Management takes time to prepare product. Good marketing skills are very important. Every success story is different. One must make their own story, it cannot be taught.

# Suman Sasmal

Leadership Development Consultant, IIM Bangalore,  
Managing Director, India and Asia, Wadhwani  
Foundation

'..an entrepreneur should have CLARITY, SIMPLICITY and a SINGLE MINDED MISSION, even when faced with failure, multiple times...'



## ***Could you tell us a little bit about your journey so far?***

My journey has been very diversified, very global and very talent-centric. I started serving in the IT industry when it had just started seeding in India, intuitively guessing that this was going to be a sunrise industry, with a wide scope for growth. IT then was not what the IT we know today, with its globalization and liberalization. In those days, IT meant me spending two years implementing a computerized system in Bhilai steel plant in the temperature of 48 degree celsius, during the summer months. Over the years, I have held a wide range of positions, from being a regular IT programmer to the head of billion dollar businesses. However, at the end of the day, I was painfully aware of the fact that I was unable to make any real impact on the world as a whole. I decided to use my wisdom, philosophy, my learning from experience ,the mistakes that I have done, and help teach young, bright entrepreneurs how to be successful. That is when I switched over to Wadhwani foundation, where I have attempted to create entrepreneurs, generate jobs, and change lives. I particularly enjoyed vocationally skilling school drop outs from government schools, so that they can make a good living out of their lives. I started working in IIM Bangalore, where I am doing research on what is the quality of leadership we'd like in the future. Here, in IIM, I try to influence at least one bright mind on a fundamental level, knowing that he/she will influence thousands of other bright minds, thus producing a multiplier effect.

## ***What motivated you through every obstacle in your life?***

I never considered an obstacle to be an obstacle. In life, everything depends on your attitude towards an obstacle-if you know what the obstacle is, or risks are, then it makes it much easier for you to overcome them. People often confuse between "risk" and "fear". You can manage risk, but you cannot manage fear. Don't convert your risks into fears. If you know your obstacle, you know your risk, and can manage it.

***If you could go back in time and change one thing during the course of your career, then what would it be?***

There are so many, you know. In retrospect, it's always things that you would do differently and I don't think there is one "single" thing that I could have done differently or better, but, if I could go back in time, I would definitely try to stop myself from taking certain critical decisions in a haste. I have a philosophy that sometimes you must slow down to move fast. This philosophy, however, came much later to me in life. In my youth, my actions were governed by a need to complete all transactions as fast as possible, which is not necessarily good in all situations. Sometimes, you have to take two steps back to move twenty steps ahead. Slow introspection and retrospection enables richer thinking and better choices. If I had ingrained this in me, maybe a couple of decades sooner, I might have made better decisions.

***What are the qualities you feel an entrepreneur should have to be successful?***

An entrepreneur should be like a superhuman, though of course that is not practically possible. One thing an entrepreneur should be really good at is having a single minded focus regarding what he/she wants to do, what problem he/she wants to solve for the rest of the world, or for an individual or for an entity. Many people become entrepreneurs to make money, but money cannot be the reason for what you do, it is the outcome of an extraordinary thing that you do. As an entrepreneur, you must also have the attribute of clarity and simplification. The simpler your thoughts, the clearer they are and the more chances of success, because everything else will follow- money, execution, and the people who will rally around you.

So, summarizing, an entrepreneur should have CLARITY, SIMPLICITY and a SINGLE MINDED MISSION, even when faced with failure, multiple times.

***If you have one piece of advice for those entrepreneurs who are just starting out, what would it be?***

Remember, a starting current is needed for any start-up. It is there inside the word "entrepreneur" - entrepreneur comes from a french word "entreprendre" meaning "getting started". So just get started, with a crystal clear idea of what problem you are solving, and see where it leads you. Don't focus on the end product, focus on the mission.

# Asgar Ahmed F

Director, National Entrepreneurship Network, Wadhwani Foundation



'To be an entrepreneur, you have to be equal measures of "besharam" and very good sales person.'

***Sir, please tell us something about your personal journey.***

I have been with the foundation for the last 10 years. I started by working with colleges in Bangalore and Mysore- supporting around 60 colleges at that point of time. Since then I have grown along with the foundation and worked with all the colleges across the country and this has created an impact, together with you, because NEN is not about the 100 people inside Bangalore, its about you guys, who make NEN what it's all about.

***What is your view about entrepreneurship in India?***

Its a good thing but some corrections needs to be made, which are already underway. The kind of funding for entrepreneurship is much better than the kind of funding that was provided even a few years ago. One has to understand that its a business cycle which will continuously fluctuate There are hundreds of start-ups, with young people like you investing and thinking that they will make millions of dollars every year. That is not really possible. It is important to set the right expectations. Not everyone is going to be the next Facebook or the next Flipkart . Also, no person is waiting with a bag loaded with money to invest in your idea. It all depends on the quality of idea you are bringing in and how will it impact the society. So it is very important to have the correct expectations.

***You work will the startups at ground level, so what are the challenges they face and what are the new policies that government are making for the betterment of the startups?***

The key challenges that start-ups face are what we call the 3 M's - a) Manpower b) Mentoring c) Marketing, Manufacture and Infrastructure. We are creating a platform to connect these start-ups to correct mentoring, investors and marketing, etc. Basically it's a one stop shop for any start-up. Also, we are working with the government to bring out conducive policies that enable seamless transition from a campus to the outside world.

***What are the qualities that you feel are important to become a successful entrepreneur?***

One key thing is Motivation. If you are not motivated, you will get to nowhere. You have to be very passionate- not regarding the idea, but regarding being an entrepreneur, because you might fail and it could be that better ideas might come, that may lead to a more lucrative business, in which case you may have to change tracks. You have to be obsessed with being an entrepreneur, not obsessed with a particular idea. If you want to change the world then you will have to work hard, and never give up your passion, your verve.

***You see so many entrepreneurs everyday. There are several failed ventures too. So what stays in your mind at the end of the day after experiencing all that?***

See, I am a failed entrepreneur, myself. I started my venture when I was in college with a few of my friends. We did extremely well at that point of time. Then suddenly a massive change took place, and there was a boom in the .com industry. We didn't know what to do because we did not have the correct mentoring or structured training and hence was not exposed to the change in the ecosystem. So we had to shut our business down. The silver lining is, failed entrepreneurs are going to become really good employees. Secondly, it's not about success or failure, it's a life changing journey. It's about learning how to be a better citizen. That learning will never fade away. To conclude, I would say that a business might fail but an entrepreneur never fails.

***Any advice for budding entrepreneurs?***

Yes. Firstly be focused, don't let your passion die, because we can't control the external ecosystem, but what we can control is our internal mindset. If we are very sure and determined about what to do then we must do it. Reach out for help. The world is willing to help entrepreneurs right now, because the world has realized that if the problem of jobs has to be resolved, not only in our country but worldwide, then it is only through entrepreneurship. There is no other way. This is why the Indian government is talking so much about entrepreneurship, now. To be an entrepreneur, you have to be equal measures of "besharam" and very good sales person because you have to sell your idea or your concept to others.

# Vikram Duggal

Consultant, Unitus Seed Fund



'.Grab opportunities with both hands when they come your way..'

***What are the challenges that you faced during the course of your career?***

The entrepreneur mindset was never very prevalent in Kolkata - the culture of Kolkata has always been the "get a job" kind. I'm not saying there is anything wrong with having a job. We also need people to work in companies. However, there was always a lack of encouragement when I was young and teeming with ideas for a business. Instead of a "take your idea, do something with it", there was always a "no, why take so much of a risk?". As youngsters, this is the best time for you in terms of starting your own business, because even if you fail, you can restart twenty times, and failure is just a part of the journey, but when you are older, I feel, its much more difficult to start off something new. So, I do feel like I could have started off very early in life, but because of this compulsion to do a job, I landed up spending eighteen years in a job, till it struck me that working in a job is not my cup of tea. I wanted to do something different. Now I am launching my own venture fund, because I want to help budding entrepreneurs in Kolkata and east India.

***You have mentored several budding entrepreneurs, of which there must have been some successful, some failed, start-ups. At the end of the day, what is the one thing that has made an impression in your mind?***

It's all about dedication and perseverance. There is nothing called failure. There are people who have reiterated the business model hundreds of times, but, every day, after getting disappointed and dejected, after being discouraged by various people, it is all about never losing hope. There is a girl I know who got funding from Ratan Tata after getting rejected over a hundred times. This is how life works. To be able to get back up the next morning, with the same enthusiasm and vigour, to be able to look at your business with a fresh mindset - that requires a lot of guts and grit. These are the most important things to make any entrepreneurship work.

***How can one overcome their fear of approaching a mentor or starting a new venture at an advanced age?***

See, to be an entrepreneur, you must be shameless. Grab opportunities with both hands when they come your way. Follow prospective mentors and investors on LinkedIn, try to reach out to them. Once you get a mentor or an investor, don't let that go to waste.

***What advice would you give to budding entrepreneurs?***

My only piece of advice would be to follow your dreams. Even if you start out, there is a high chance you might fail, but learn from your failures. In India we generally do not encourage failures. We tend to dissuade people from trying out something new, and we make them fear failure, by citing examples of people who have not succeeded in their enterprises. I think that is a very wrong kind of a psychology. We've got the brains, we've got one of the best education systems in the world, we've got the talent, the passion, the energy, the dreams. India has got such a huge market with so many unsolved problems. We need people to solve these problems of today and tomorrow. So, don't be discouraged. Learn from your failures. Either you succeed or you learn, there is nothing called failure. You just need to have that kind of passion and dedication and keep on going for it. Try to benefit the society. Keep a balance. Benefit society, and at the same time make money for yourself. There is nothing wrong in walking a middle ground.

# Aloke Mookherjea

Independent Director, Woodlands Hospital

'..The passion or fire in the belly, so to say - the chutzpah or that gumption, is necessary to be an entrepreneur.'



***Could you tell us a little bit about your journey so far?***

I belonged to a typical middle class family. My father was a Government servant, and he was one of the most honest men I knew. After I passed my Electrical Engineering from Jadavpur University, I tried my hand at around five to six different jobs, which were aplenty, at that time, especially for an engineer. I spent some time abroad to join Flakt Woods India Limited, which was internationally one of the largest companies in air pollution control. I carried on my work in England and Scandinavia, where I was able to expose myself to the latest technologies at that time. Eventually I joined one of the largest multinational electrical engineering companies, where I retired. I am currently the independent member of board of directors of Woodland Hospitals, and am a part of the governing bodies of various institutions, and I am also happily teaching management and technology, which wasnt possible for me before when I was actively participating in executive management positions.

***What are your views about the booming entrepreneurship trend in India right now?***

I have been associated quite a lot with start ups and entrepreneurship, especially for the past one or two years. Personally I think it is important to remember that there has to be entrepreneurs, for the sake of the development of the nation, because it is impossible to ensure employment to everybody, and it is the entrepreneurship that will generate jobs. So we have to help boost some people who will not be job seekers, rather job givers. It is my opinion that the spirit of entrepreneurship is imbibed in the spirit of the nation.

***We see new start ups every day. How, according to you, can we get more women to venture into entrepreneurship?***

It is a natural question in a male dominated society, but I think the glass ceiling is gradually being broken. I have seen many women entrepreneurs. You see, in our past, women faced several restrictions. They were not even allowed to have a job. But we have come a long way from that. It would take some time to get as many women involved in entrepreneurship as men, but the point I want to make is - never try to make a distinction. Don't say you want "women" entrepreneurship, say you want "good" entrepreneurship. It is better that we don't divide it in that way - if you must, make a distinction based on whether the entrepreneurship is good or bad, excellent or not, rather than "man" or "woman". I don't think that serves the purpose for them or for the nation.

***What advice do you have to give to budding entrepreneurs?***

The passion or fire in the belly, so to say- the chutzpah or that gumption, is necessary to be an entrepreneur, because initially it will be very tough. This temptation of the monthly cheque dangling in front of you is very difficult to overcome but once you can get out of this temptation, I believe it can be an exciting experience, wrought with obstacles, challenges and difficulties no doubt, but at the end of the day, worth it. Don't chase money, you may not get it, chase your passion, and money will chase you. You need the persistence, the determination, the conviction. Don't fall in love with your projects. If, after several tries, it is not working out, have the strength to try something new, expand your viewpoints, don't remain stuck.

# Kirti Bhoutika

Winner, Masterchef India season 5



'..I hope to see more and more women taking up cooking as a career and not just a compulsion.'

## ***How did you realize that cooking was what you wanted to pursue as a serious career?***

I have always had big sweet tooth, with a special weakness for "mithai" and sweets. This ardent love for sweetmeats instilled in me the urge to make something of my own- I started cooking, and gradually I began to enjoy it tremendously. I lost all sense of time when I was cooking. Eventually, I realized that this is what I want to choose- not as a possible hobby, but as a viable career option.

## ***What has it been like for you- the journey from being an ordinary girl to the winner of Masterchef India?***

My love for cooking started when, in class X, I had made a terrible chocolate cake. After a lot of YouTube videos, new recipes and failed attempts, I finally cracked the recipe for that one chocolate cake - and that changed my life completely. Being a student of Commerce, people expected me to be a Chartered Accountant, but as I have said before, there was nothing I wanted more than to be a chef. When I told my father that I wanted to pursue Hotel Management, he refused immediately, because he wanted me to pursue something that was more "education centric". I didn't want to defy him, so I decided to walk a middle path - I opted for Food Science and Nutrition Management. My love for baking made me start my own bakery in my first year of college itself, called "The Sugar Plum Cakery". As the business got bigger, so did the pressure of my assignments, thus leading to a very hectic three years. However, I kept telling myself that maybe this would make all the difference, maybe, one day, all this hard work would make sense. Masterchef India happened to me right after college. I had signed up for this competition, expecting nothing, knowing I had nothing to lose if I did participate....and then I won.

***What was your first experience on the sets of Masterchef Australia, which will stay with you always?***

One experience I will never forget is the first time I had to cook non-vegetarian food, and that too on the sets. Being from a vegetarian background myself, I had never tried something like this before, and it was a very unpleasant experience for me, but I eventually got the hang of it, and did well.

***What has Masterchef India taught you?***

I met a variety of people and learned from them along the way. I learned to have absolutely no fear of failure in my mind. I simply took one day at a time. It didn't matter whether I won or not, for I had nothing to lose if I lost and everything to gain if I won.

***What are your views regarding the food industry and entrepreneurs who are interested in joining this industry?***

The food industry is growing tremendously every single day. The opportunities for budding entrepreneurs in this industry are endless, especially nowadays, where there has been a growth in food channels, food shows, radio shows about food, people who are starting their own food businesses, even people who can't cook are opening up successful restaurant chains. People are establishing health food cafes, there are food bloggers and food vloggers, who are now earning as much as any chef. There was a common perception that you could get only culinary success by becoming a chef. That is not true, especially today. However, there is also a lot of chance for failure.

***What advice do you have for budding food entrepreneurs?***

You need to do your research really well - what works in the market, what people like, what they want, what price they are willing to pay, etc. Secondly, innovate - never copy paste. Do not be stagnant, keep yourself updated with the recent trends. Having said that, I dream of playing an integral role in the food industry myself, and I hope to see more and more women taking up cooking as a career and not just a compulsion.

# Baishali Dalmia

MLA, Howrah Constituency

'..nothing in this world will be spoon fed to me and I must know how to earn for myself.'



***Could you tell us a little bit about your journey so far?***

I was born to Mr Jagmohan Dalmia, in 1969, and had started earning from a very tender age, while I was still in school. While growing up, I have always believed that nothing in this world will be spoon fed to me and I must know how to earn for myself. My father never felt ashamed of me when I initially decided to try my hand in a business, by selling certain small items in a nearby shop. Now I have been into business for more than 20 years. Marketing, Administration and After Sales Service are three components of my business agendas. In 2016, I joined Congress, was given a ticket to contest the assembly elections from the Bally Constituency, and was duly elected to the state assembly.

***What according to you makes a good entrepreneur?***

I believe that your ability to sell your product on a large scale, and the way you sell it, are indicative of your capability as a businessman or entrepreneur.

***Do you have any advice for the budding entrepreneurs and our readers?***

Study properly, work hard and nurture your ideas. These can take you a long way along the path to success.

# Tarun Mullick

Founder and MD, Clubb International Pvt. Ltd.



'..entrepreneurship is an art of living..'

## ***How did you become the successful entrepreneur that you are today?***

I lost my father at the age of 6. I remember hearing several words of discouragement from various people, who would wonder whether I would ever turn into a gentleman, now that my father was no more. Being from a swimmer family, my immediate uncle being a swimmer himself, I decided to become a professional swimmer, but eventually, at the age of 12, I realized, swimming was not for me. So I switched to Table Tennis, where I became Bengal champion and a national rank holder. It was my mission at that time, to get a good Government job using my Sports quota. However, eventually, I came to recognize in me, an underlying need to do something different-something better. I decided to throw caution to the wind and start my own business with only Rs 2000 in my pocket, and determination on my sleeve. Since then there has been no going back. Now I am the founder and Managing Director of Clubb International Pvt. Ltd. With the vision to guide and encourage other budding entrepreneurs to success, I also take classes on "Entrepreneurship" at Entrepreneurship Development Institute (EDI) Ahmedabad, National Institute of Design (NID) Ahmedabad, National Center for Jute Diversification, NIFT, National Jute Board, Ministry of Textiles, Govt. of India and am happy to have been able to develop, in their banner, more than 200 small entrepreneurs mainly in rural areas.

## ***What, according to you, is entrepreneurship?***

To me, entrepreneurship is an art of living. By 2020, almost 55 crore people are going to be unemployed. The only thing that can solve this is entrepreneurship, and MSME (Micro, Small and Medium Enterprises). Entrepreneurship involves innovation. Entrepreneurs do the best kind of social service- not only do they generate employment, but they also contribute towards improving the financial condition of the country, and support other industries by procurement and supply.

### ***How can one decide whether their entrepreneurship idea is a good one or not?***

I believe that to get a futuristic idea, you need common sense. The entrepreneur must judge and see if his/her idea needs is logically correct, commercially viable, aesthetic and different from others.

### ***What advice would you like to give to entrepreneurs who are just starting out?***

For a business, money is not the only criteria. To start a business, you need three things - PRODUCT, CONTACTS, FINANCE. If you have any two of these three, then the third one will come automatically. They are interrelated. Knowledge capital is ultimate capital. Financial capital is not the ultimate capital.

It is also important to remember the 3 word marketing - Product strength is the ultimate strength, Price marketing is the ultimate marketing, and lastly, whisper publicity, or as you also say word of mouth publicity, is the ultimate publicity. Always keep a clear head. If you know what you are doing in your business, then everything will fall into place.

# Ankit Kumar

Founder, RE-Rise Incubation and Acceleration Pvt. Ltd.



'..a good idea is one that is fresh, unique and well-researched.'

***Could you tell us a little bit about your current venture?***

Well, currently I am the director of RE-Rise Incubation and Acceleration Pvt Ltd, which aims at helping aspiring engineers to turn their ideas into reality. We focus mainly on pre-seed and early stage enterprises, and we support them throughout. We have over 60 mentors on board, largely from solar, wind, biomass, water, organic farming, sustainability and EV domains, who have expertise in the fields of execution, financing, business modeling, etc, so that entrepreneurs get the necessary impetus to start and eventually grow. Thus, RE-Rise acts as a catalyst between entrepreneurs, investors, mentors and stakeholders.

***How should one go about developing an idea and on that note, what according to you is a good idea?***

The answer to developing an idea is to understand the "basics". In real life, we may encounter something, and feel that it could have been better or different, and that there can lead to the birth of a fresh idea for an entrepreneurship. In order to avoid bias regarding your own idea, it is imperative to form a team, and get an unbiased view from others, by means of discussion and brainstorming, and in this way the loopholes of the idea are also exposed. Do your research, chalk out its pros and cons, and figure out how to handle or nurture the idea.

According to me, a good idea is one that is fresh, unique and well-researched.

***What do you feel are the ingredients for a successful entrepreneurship?***

To me, for any entrepreneurship, the team is important. I personally invest in a start-up that has a well-settled team, with every team member bringing in their own set of expertise - one may handle the technical aspect ,another the marketing part, and so on. This gives the enterprise a holistic completeness. There should also be a great deal of determination, patience and a positive outlook.

***What advice do you have for entrepreneurs just starting out?***

As i said before, be well-researched about your idea, form a nicely balanced team, and have a fail-safe plan chalked out, with an intention to scale-up. Scale-up is an important criteria for any investor.

When you have an idea, and you have your team ready, approach an investor for the sake of a feedback - see if he is willing to be a mentor, keep him updated regarding your plans and activities. Eventually when you are finally ready to go into the market with your product, chances of rejection become minimal.

Source: UEMCON'18



# DOWN THE MEMORY LANE



## Sunny Agarwal

**Co-Founder**

IEM E-Cell

IEM Kolkata, IIM Bangalore

Present : Area Sales Manager at Nestlé

Around 2008-2009, extracurricular activities were not a comfortable option amongst students, but aiding to the level of brilliance displayed through various technical projects and managerial ideas, we resolved into establishing a particular student driven domain inside the college for all the technically enthusiast and business oriented people. The process of executing the successful initiative was propelled by the NEN E-Week, in which we consecutively stood champions and runners up for 5 years. Much appreciated, and with a huge affirmative response from the students' side, we officially brought IEM Entrepreneurship Cell into the limelight. The torch has been passed on from hand to hand, but undoubtedly, the legacy still remains unperturbed.

For all my inquisitive and indefatigable juniors, a small piece of wise advice. Make connections. Take initiatives. Communicate with people. Express and convey the ideas of 'entrepreneurship', 'start-ups', 'business incubation', 'seeding', etc. to more and more pupils irrespective of academic year or curriculum, develop of a database of all alumni and let us nurture and help you out by pooling our experience and utilising our present resources. The more you develop others, the more you develop yourself.



## Sk. Nazrul Rahaman

**Ex-President ('15-'16)**

**IEM E-Cell**

**IEM Kolkata**

Present : Java Trainee at **Infosys**

Presently a Java trainee at Infosys, I was the President of IEM E-Cell for the year 2015-2016 alongside Krishnendu Paul. We had to organize numerous events under the banner of E-Cell. Also being a part of the technological fest of the college, we had to organize numerous events and initiatives which helped me to maintain a mass. Organizational abilities, executive prowess, coordination, and eradication of mutual miscommunication being important parts we had to concentrate upon. Day by day from every failures I learnt how to organize any type of events, to maintain a certain amount of people, and also helping the juniors to learn. From this non academic works I found a new way. I never expected to be proficient to do this kind of work. But I am now. Working under IEM E-Cell helped me gain this. Sometimes being a trainee here in Infosys Mysore feels like I am in my college. 4years in IEM helped me in many situations to survive here in Infosys Mysore.



## Shinjan Mitra

**Ex-President ('14-'15)**

**IEM E-Cell**

**IEM Kolkata**

Present : MTech1 CSE RA at **IIT Bombay**

It's really difficult to look back now and recollect our 'life-in-campus' stories primarily because I have extremely poor memory and also because so much has happened since.

**Disclaimer:** The author has no intention to hurt or defame any individual or group and apologizes beforehand for any misrepresentations.

I am currently an MTech first year (RA) student in the Dept. of CSE at IIT Bombay. I have almost no interest in machine learning, which is the most prospective career opportunity in the industry today. My interests include systems, networks, robotics and am currently dabbling in IoT and SDN. We started tinkering with Arduino and embedded systems early on in the first semester working on hobby projects. The experience gained from participating in Innovacion, E-week and other college fests notable among them being IIT KGP's Kshitij, has proven invaluable till now.

There is an unspoken guideline in IITB that if you have free time while on campus, then you are doing something very wrong. I was really lucky to have a bunch of awesome friends - seniors, juniors and batchmates alike, and we pretty much implemented this during our time at IEM. We were always busy with something or the other encompassing academics, fests, projects, and entrepreneurial attempts. I was part of a startup during my time at IEM, and although it didn't work out the way we had hoped it would, the experience and technical know-how that I gained from that endeavour has helped me in multiple occasions.



## Urmi Saha

**Ex-Member ('14-'15)**

IEM E-Cell

IEM Kolkata

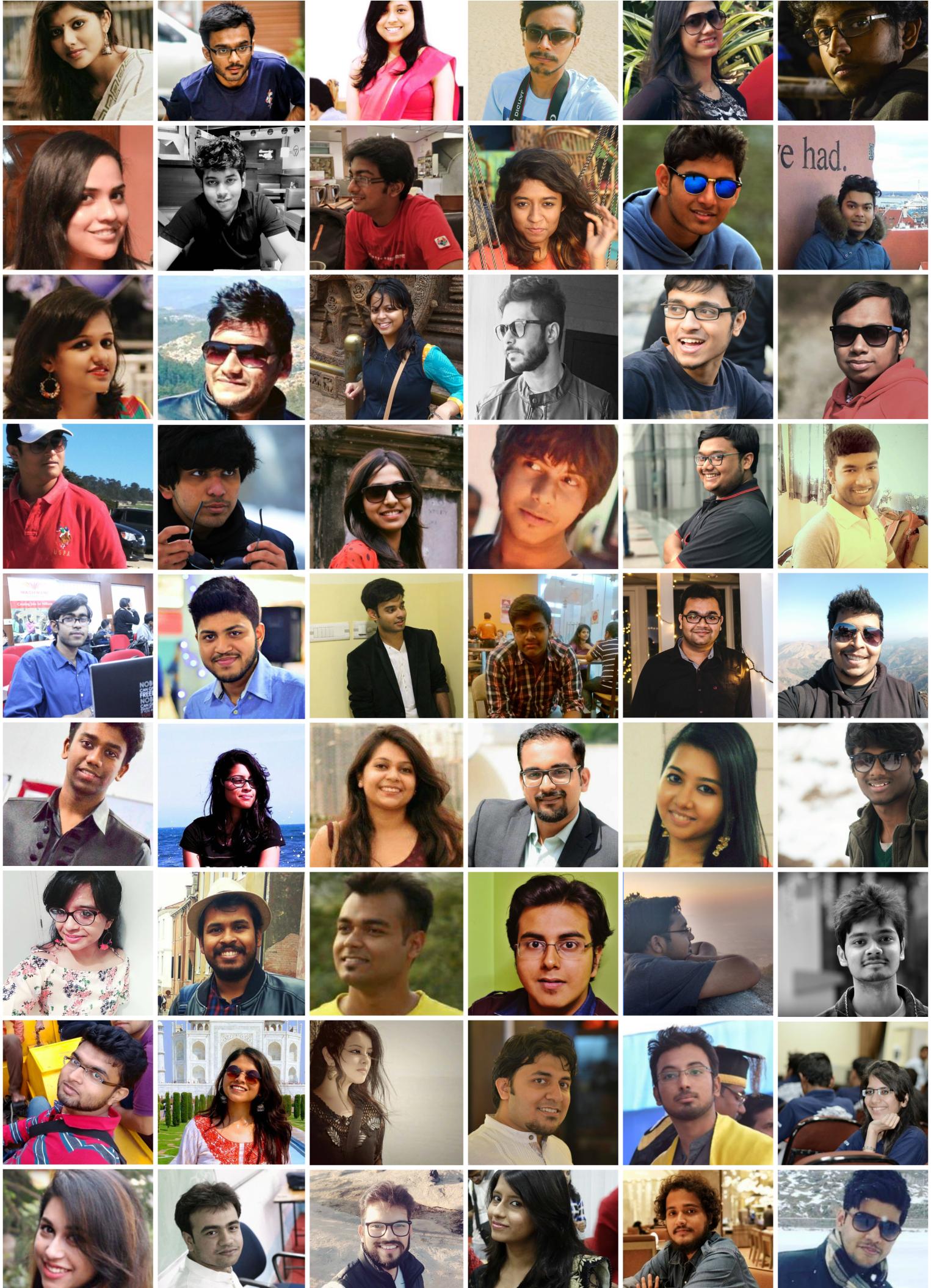
Present : MTech1 CSE RA at IIT Bombay

I am an IEM passout of 2016 batch. I am currently pursuing my M.Tech in Computer Science from IIT Bombay.

I was associated with IEM E-Cell from my 2nd year (2013). And that was the first event which gave me exposure to the world beyond academics in IEM. It was difficult, yet fun. I learned how to manage stuff, take responsibilities, execute plans properly and even damage control.

E-Cell really taught me a lot and I am really happy that I was a part of it for 3yrs continuously.

The awesome team!







*Leisure  
Reading*

# Top 5 highly successful start-ups with no IIT/IIM founders

By Sanjana Jha

Degree has a value but not always. There are many highly successful start-ups with no IIT or IIM founders in the panel and are doing far better than the ones which are founded by IITians or IIMians.

Let us try to understand a situation with the help of an example, a scenario which we find ourselves into quite often!

“Arjun it really doesn’t make sense; Why all of a sudden, just why?”

“Because I want to and that should be enough. You never stopped Manish then why are you stopping me?”

“You don’t compare yourself with Manish, he went to IIT.”

“So?”

The answer to this ‘So’ is usually silence that means to express the fictitious notion that only startups with IIT and IIM founders can be successful.

Arjun is a man with dreams and aspirations. Like his cousin Manish who is an IIT graduate he too wants to build his own startup but is met with doubts and uncertainties of his sister Mona. Mona personifies the obstacles that probably every non-IIT entrepreneur had and still has to face. It is a general perception that IIT/IIM graduates are always successful as entrepreneurs and research shows that such entrepreneurs get funds much more easily than a non-IIT/IIM. But figures suggest that only 60% of them are successful. Not a huge blow to the general perception but still something.

We have complied a list of top ten highly successful startups with no IIT or IIM founders:

## 1. BookMyShow

The most common name that comes to mind when movie plans are made. BookMyShow is a customer obsessed venture founded by Ashish HemRajani in the year 2007. BookMyShow gets approximately 500 million page views per month. In addition to that in the year 2014, BookMyShow entered the 1000 Cr valuation club. Needless to say, BMS made its mark with no IIT or IIM founder.

## 2. CarTrade

CarTrade is an online auto classifieds platform serving as a marketplace for users interested in buying and selling new and used vehicles. Founded by Vinay Sanghi in the year 2009, this website connects customers and dealers where both the categories cherish win-win situations. CarTrade has 250+ employees. So definitely a win-win situation for CarTrade as well. With over 4 million monthly visitors, CarTrade seems to flash and flash hard.

### **3. Directi**

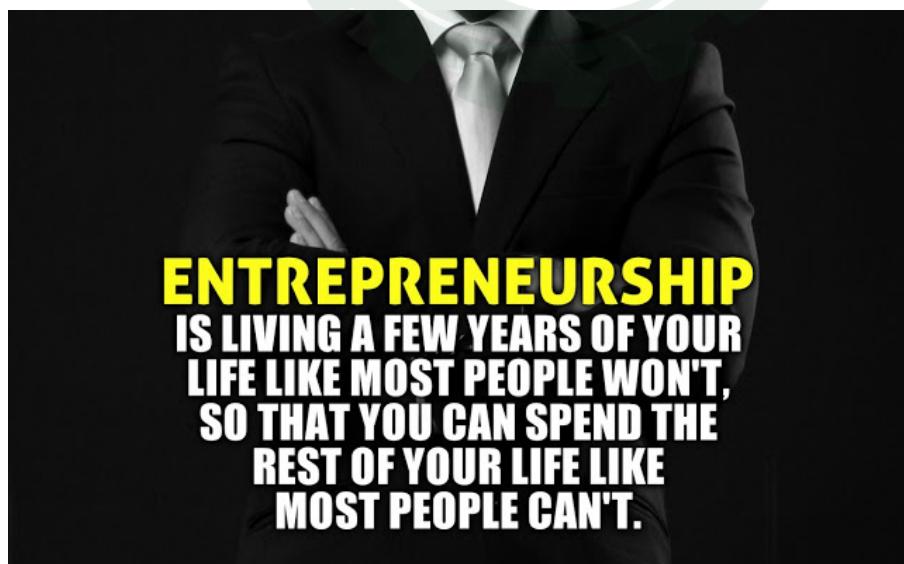
Yes, it was a startup. People, especially students know Directi because of Codechef – a common name in the world of competitive programming. Directi is a global technology and web products company with 1500+ employee. Bhavin Turakhia, the co-founder and CEO of Directi has done a commendable job making a company whose value stands is estimated to be \$1.4 billion. With over 50,000 channel partners and 1,000,000 customers, Directi is all set to a phenomenal global journey. A startup that any IITian or IIMian would covet.

### **4. Freecharge**

Founded in 2010, FreeCharge is a leading digital payments platform in India. Founder Kunal Shah says persistence may help you but entrepreneurs need more than persistence. As by news reports, he sold it to Snapdeal for a whopping \$400 million, the largest deal to date in India's consumer internet space. Enough said.

### **5. PayTm**

With absolutely no connection with the IITs or IIMs, founder Vijay Shekhar Sharma made his way to the top with PayTm reaching everyone in the digital world. The journey from one97 to PayTm whose current value is a little over \$3 billion in the market in 2016. Vijay redefined success with a dream, a dream to be at the top, to be everywhere. You can make an estimate of how successful PayTm is from this picture. Even Panwaalas have the label—"PayTm Accepted Here".



# **Top 20 low-cost startup ideas for college students in India**

An excerpt from an article posted on The Hacker Street by PRATIBHA GOENKA

While job uncertainty is increasing every day, there has been a flurry of startups taking birth in the country. While there is no 100% guarantee that all the startups will succeed, innovative startup ideas are taking birth every day to solve problems existing in the country from time immemorial.

It is often said that “none of the startup ideas are unique” and the ones we provide below may hold the same argument but these are definitely the hot business areas of today’s startup era which you may start and make them unique in your own way! Very aptly, “uniqueness depends on execution”. So, to keep the startup spirit afloat, here are 50 startup ideas that you may start in 2016.

## **1. Selling homemade products online**

Indian women are adept in creating home based products and this is a proven fact. Even if they are often not given the opportunity to step out of home and convert their skills into business, they do it perfectly even from home. This sector is still relatively untapped in the country and Indian women can be helped to showcase their skills online under a common platform. Customers will also get the privilege to choose the best among many.

## **2. Selling healthy and organic food**

Who doesn’t love junk food and who doesn’t understand the importance of nutritious food? Why not make an amalgamation of the two with technology and sell healthy foods with less spice and oil.

## **3. Selling personalized gifts**

This is definitely what home-based women entrepreneurs can try. They can make personalized gifts based on their customers’ taste and occasion and sell them online. There are innumerable things that can be done centered around this.

## **4. Data security**

With so much information online, there is a definite need to secure data by offering content protection solution for online businesses to protect their website content from competitors and fraudsters.

## **5. Customized packages for content service**

With 90% of companies relying on content marketing these days to market their products and services, there is a definite need for more agencies which can assure trusted content service in customized packages to companies.

There can be a platform where users and their friends can upload videos and talk about their friends as well. Users can add videos of themselves talking about their interests, who they are and who they are looking for which can help them to find the perfect partner real-time!

## **7. Personal makeup and beauty services**

Everything is going online – from clothes to accessories, food to cars! So why should our makeup services stay back to the traditional beauty parlors! Today each of us wants to have services at our footsteps and so there is a great need for personal makeup and beauty services who can come to your rescue even in emergency situations.

## **8. Career Counselling**

While outside India, most of the schools provides the students with personal mentors, this is not very common in India. We are lost in our traditional education system which doesn't seem to change. Hence there is a much need for startup ideas based on career counselling services which can be reachable to each and every student so that they don't get trapped in the rat race.

## **9. Pay it forward coupons**

May be in restaurants or beauty salons, spas etc. pay-it-forward idea can prove to be the new selling and retailing process. When a customer eats at your restaurant or uses your service, issue him/her a coupon for another restaurant which expires in a month or so. The process goes on and the result is some new faces and increased sales!

## **10. Online Courses**

It is not always feasible for everyone to pay huge amount of money in online courses provided by Coursera, Udemy etc. Also it is not necessary that everyone will comprehend the lectures completely since a significant number of Indian population still studies in regional languages. Whatever may be the case, what is similar between everyone is the eagerness to learn things apart from academic lessons. Hence, multilingual online courses are bound to work in India.

## **11. Your personal assistant**

Nowadays people have become so busy that the startup ideas which save even 10-15 minutes can also turn into a billion dollar one! They want to have dinner; online food delivery is at their service. They want to go somewhere, online cab companies are at their disposal. Every small thing is at hand. So in that case, a startup which provides a personal assistance doesn't seem like a bad idea. Just a Whatsapp message or a call, and any kind of work will be done!

With pet care being a 800 crore market in India and people spending 10,000 INR on an average every month on pets, this sector is surely going to succeed. Selling a wide variety of products online or providing grooming services for pets are the things that can be done in today's era of startups.

### **13. T-shirt printing**

T-shirt printing is fast catching up in India and there are many who are providing this service. It has a bright future in the country owing to the fact that all big organisations and enterprises need t-shirts, hoodies etc in bulk. Little bit of customization in each of the t-shirts based on the kind of event and organisation can work wonders.

### **14. Day Care**

For women who want to advance in their career, it becomes difficult for them to manage both work and family effectively. And it is not always possible for them to take their child to work. In such cases, startup ideas related to day care have got wide scope which if implemented with proper measures can prove fruitful.

### **15. Crowdfunding from social services**

Helping people raise funds through crowdfunding, i.e., from individuals all around who are willing to believe in your idea is an amazing way to turn your venture into a success and bring about a change. With your platform, you can help to raise funds for things like creative ideas, causes, charities, events and also community-led activities.

### **16. Outdoor Advertising**

It is very true that digital marketing is way more effective and cheaper than traditional marketing but it is also true that outdoor advertising like billboards, bus benches, etc. have not lost their significance. Hence this can also be a good opportunity for someone to implement.

### **17. Cheap energy from alternate energy sources**

The need for alternate energy sources don't need any special description. Producing electricity from solar energy, wind and hydel energy has got immense scope in a tropical and exponentially developing countries like India.

### **18. Women safety**

Building apps and websites for spreading awareness, helping women with tools that can help them in urgency is the need of the hour! Don't just take this as a model of making profits. If you can help change the situation, money will follow you. It's high time to focus on problems that we come across every single day and not turn our heads away in hopelessness.

As it is said, “one man’s trash is another man’s treasure.” If you’re an artist or just have a knack for crafts, try turning items that would otherwise be thrown out into useful products and selling them at craft fairs or just do it through your own website! You can also offer to turn other people’s unwanted items into upcycled products, like refreshing outdated clothes to make them more stylish or turning old T-shirts into quilts, for example.

## **20. Copywriter**

Anyone with a website will tell you they have one constant need: new content. Search engines favor websites with new, relevant and constantly updated content and most businesses don’t have time to devote to generating copy all day. Providing copy-writing services at affordable cost may be your next business if you can do it responsibly.

I guess you have already got an insight of what all you can achieve in this segment! So, which one are you thinking to go for?

# 4 Types of People Found in every Startup

By [Sanjana Jha](#)

The full article may be found at <https://in.thehackerstreet.com/10-types-of-people-found-every-startup/>



Diversity is what defines India. Be it cultural or with the different types of people with their religions, castes and political views.

Let's come to a smaller world – The world of Startups. Even 'startup ville' has its own diversity with different types of people coming from different backgrounds and mentality. Caste and religion is usually not an issue here, but your approach to a particular problem or situation does categorize you. We know these words are reminding you of your bossy boss or the 'oh-I-am-so-good' people about whom you discuss with your 'workplace bff'. Here we have categorized the ten types of people you usually encounter in a start-up. We have Chandler explaining the 'moo-points' to Joey:

"Hey chandler, how's it going your side?"

"Pretty much the same, except for the people. You do see a variety more than the ice-cream parlor. Here you just don't know how tasty it will be opening the package."

"It's good exploring new things when you compare them to ice-cream."

"Not always. And definitely not at your job."

"But I love ice-cream."

No worries, we saw that coming. We all know Joey loves food. Anyways, here is Chandler describing the five types of people found in a start-up:

### **The 'I-am-always-right' Boss**

The word Boss is self-sufficient in explaining itself. When you enter a startup, you step into it with a preconceived notion that "The Boss is Always Right". Even if you don't, they will hammer it into you sooner or later. And the boss does take pride on being the boss – not always arrogant but definitely bossy. Ya, we all hate it at times and wish badly we didn't have to deal with it. But a startup will not be a startup without its boss. We all love Monica!

### **The 'Pet'**

This is probably the most common type found in a startup. Of all the types of people, the pet who gains everything by licking boots is the earner of uniform hatred from all.

Sometimes they are self-proclaimed or hand-picked, but at the end they are pets. They love going to the boss for even the smallest reasons just to increase visibility. They love doing the jobs given by the boss but not by other colleagues. Enough said.

### **The 'Lazy Bones Jones'**

Some people know they have to work and that's the beginning and end for them. Keeping the work for the last moment, counting days to the deadline are some characteristic traits of such species.

When everyone is having a hard day at office, he/she might be seen chilling somewhere. Looking at the positive side, they actually give you hope – hope that you won't be the first person to be kicked out from your job.

### **The 'Engine of Enthusiasm'**

You go to office, sit in your cubicle, attend meetings, and handle projects. For some people, the routine is slightly different. Their unparalleled enthusiasm in any work will refresh you. They may or may not be the star employee but are definitely the stars that the office would hate to lose. They work better than coffee.

### **The 'Workaholic'**

You just don't know they are working for promotion and bonuses or aiming to beat bolt at work marathon. They are the always bee busy people with no time for being social. They are usually the most courteous fellow of the office but if they can't beat the deadline it's hell on earth for them. The first one to come and the last one to leave the office who mainly survive on coffee and often the employee of the month.

“That reminds me, hey Joey is Phoebe back?”

“No, she got another offer for smelly cat. So will be late.”

“That’s enthusiasm, my friends. “

“It’s great! In a way, you actually got your FRIENDS there.”

“Yeah, just in a different packaging. A startup is a place of new ideas and new people. The different types of people you meet there help you grow into a better person with better ideas and new experiences.”

“Hey wait, did you ask them?”

“What?”

“How yo doin? ” :p



THE GOAL ISN'T  
MORE MONEY.



THE GOAL IS LIVING LIFE  
ON YOUR TERMS.



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