

dot ORG

IEM E-Cell

Been saying
“the society needs to change”
too many times?

Make the change, be a *social entrepreneur*

Interviews:

Aji Issac Matthew
Prof. Satyajit Chakrabarti

DIY AUTONOMOUS ROBOTS

Unexplored Careers:

think. iNNovate. cReate.

Motivation From:

dontgiveupworld.com

Bitstripped!

Device Reviews

Samsung Galaxy SIV

HP Envy Laptops

Are you risking your success?

As I write this, I realise that we have travelled long and far from our first NEN National Championship in 2009. Our E-Cell has developed and encouraged entrepreneurs and has taught each one of us – that we are capable of creating our own futures.

To most observers, IEM E-Cell is an organisation. To us, who have seen the greater truth, know that we are a family. We fight, we cry, we laugh and most importantly, we work together. Every E-Week, we discover friends we never thought we'd have. Every E-Week brings us closer together – those 14 days of sleepless nights have done so much more than just get us 3 championship trophies.

Our ideology states, "To encourage students to consider self employment as a career option, provide training in entrepreneurship and increase the relevance of management in the non-corporate and unorganised sectors." What we work towards, however, is to make dreams come true.

Presenting Volume I, Issue I of .ORG. I wish all our readers a very happy Poila Baisakh. Stay with us. Grow with us. Grow up with us. tHink. iNNovate. cReate.

Agomoni Sarkar

Editor



*Our **Student Head** insisted on writing a fore-word to this e-zine. Nothing we said could stop him – so here goes! ☺*

"Logic takes you from A to B; imagination takes you everywhere." This has been the mantra for all IEM E-Cell members from its very creation and it is this same imagination that has brought us where we are today. It all began in the first year of my college life when the college celebrated E-Week and we won the National Championship from NEN. From there, the whole journey is a long story – and this limited space does not let me cover even a fraction of it. Being a part of the E-Cell has changed my entire approach towards life.

I would like to thank all the faculty members and my seniors – Souvik da and Sunny da who brought me into this, and gave stability to the system. A heartfelt thanks to my batch mates – Suman, Shiladitya, Zinnia, Susmita, Soham, Saurav, Sandip, Saptarshi, Gourav – you guys are awesome! Finally, loads of good wishes to the upcoming, amazing bunch of juniors – Arif, Agomoni, Rohit, Aman – enjoy this journey. It's a cool one.

Suhail Ghosh

We are hiring!

Interested in design? Act critic to every new gadget or software that pops up? Fond of taking interviews? Get too many ideas but too little time to DIY(Do it yourself, silly!)? Come join the .ORG division of IEM E-Cell. Send in your applications to iem.ecell@gmail.com along with a 3 line statement of what you can offer us.

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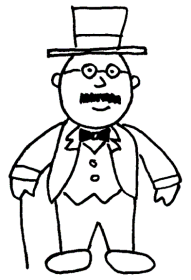
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Unexplored careers

Students fresh out of class X have three choices before them: Science, Commerce, Humanities. Each of these choices have their own sub-choices. Choosing among these are a given and behold! Suddenly your whole future is laid out before you. Sounds boring, right? We at the E-Cell strongly believe in the three ideals of "tHink. iNNovate. cReate". So, here are 5 reasons not to be part of the 9am rush to work :



1. Actuary: This is for the numbers guys who shun from the cut-throat competition in the 'regular' fields of commerce. An actuary is a professional who assesses the financial impact of risk and uncertainty. It requires a basic knowledge of Commerce and an ease in Mathematics(esp. Probability).

2. Linguistic Expert: If language is your forte and you are always looking for phrases in eloquent languages expressing certain meanings, this is the career for you! Linguistic experts can work as translators in MNCs, Embassies and for the Government.

3. Interior Designer: Though everybody knows what an Interior Designer is, not many know that it is actually the perfect balance between of a technical and creative field. An interior designer requires patience and a lot of it. But if you have that, and a touch of creativity, there is no milestone you can't cross in this field.

4. Writing: While a lot amongst us can write a lot of poetry and good stories, very few really think about it as a viable career option. But if you have a flair for writing, there has never been a better time to take out your quills, err pens, err keyboards.

5. Food Critic: This is for all the foodies. Can you think of anything better? To get paid for eating and criticizing food? But, you have to learn to be unbiased. Plus, you have to learn to bear with the not-so-good food. Add to it the perk of the bribes you can get for bad media of a restaurant. *Slurp*



Word from the wise

"Do it yourself! There's nothing you can't learn. I had zero experience coding a year ago, and now I'm the one helping newbies out on the forum. And if you have any talent for visual design and game design, do that too. If you lack the talent, find a partner who can fill those roles. And most importantly, don't let anything stop you. Finishing what you start no matter what obstacles you face or how exhausted you feel is the most important thing. It's not worth anything unless you finish.

Lastly, make a great product. Don't compromise. Good games don't sell. Only great games sell."

– Naomi Kokubo, LavaMind (developer of THE BETTLE BOUNCE)

App Development in the Android Platform

– One of the great things about Android's ecosystem is the number of indie(read independent) developers who are able to enter the market successfully, providing a great product and inspiring would-be developers to join in. For many though, Android development in general is a mysterious topic. "How an app or game goes from an idea to an entry in the Play Store is unknown, but (thankfully) not unknowable."

From free online tutorials to meticulous guidebooks (O' Really :P) , there are plenty of ways to get started in Android development.





- 1) Whose tagline: "The edge is efficiency"?
- 2) When did the World Bank come into being?
- 3) How many times have three people shared the Nobel Prize for Economics?
- 4) Whose tagline: "Join the conversation"?



- 5) Which brand name is derived from the word 'polar' suggesting coolness?
- 6) Which was the first public sector mutual fund to be set up after the Unit Trust of India?
- 7) Which was the first Indian bank to open an international branch and where?
- 8) "Life is One Incredible Journey" is the baseline of which magazine?

9)



Identify the advertiser – think lateral.

Mail in your answer to iem.ecell@gmail.com

Answers :
 1. Bombay Stock Exchange 2. July 1944 3. Three times 4. twitter.com
 5. Polo 6. SBI Mutual Fund 7. Bank of India in London 8. Outlook Traveler

Are you ready to start-up?

A start-up is nothing more than a hypothesis, and the first phase of every start-up is testing that hypothesis. But even before that come the questions you need to ask yourself.

1. Why do I want to start a venture? There's a good chance that you won't make money, get famous, or acquire significant power. If any of these motives is the primary driver, get out of there fast! Start-ups require passion and persistence, which flows from purpose. Find your purpose.

2. Am I ok with failure? Start-ups are hard, and failure is guaranteed. The fear of failure can cause you to make poor, short-sighted decisions. Even if you succeed, there will be plenty of unfulfilled expectations, and disappointment. Can you handle the pressure?

3. Is my product a solution to a problem and does the solution already exist? Google didn't like the inaccuracy of search results. Instagram thought photos taken with a mobile phone looked boring. Keep it simple. If you're still looking to create small pieces of paper that you can stick on your fridge, that solution is already there! No amount of innovating is likely to displace it. What is your USP?

4. Who is going to buy and why? Getting people to part with money is a challenge, and outside of your family, no one cares. Be very specific about the type of buyers you're trying to reach, their motives, and your ability to reach them. What are you going to use to get customers, and what is the acquisition cost?

5. Can the concept be easily described and understood? Nothing complicated goes anywhere. If your potential customers, employees, or partners can't easily understand exactly what you're doing, you're in big trouble.

6. Am I offering a vitamin or a painkiller? While valuable, no one wakes up in the morning wanting a vitamin. Conversely, painkillers address an immediate and important need. Selling vitamins requires establishing the need first. Selling painkillers merely requires the presentation of a solution. In which category does your product/service reside?

7. How much cash will I need? What resources will you need to purchase to be successful? Whatever you just estimated, triple it. How long will it take to start bringing in significant revenue? Whatever you just said, think four times.

8. What's my burn rate and runway? Burn rate is the amount of cash you consume every month to keep the doors open. Runway is the amount of cash on hand divided by your burn rate, which is usually stated in months. A frequent mistake is underestimating cash needs and overestimating sales opportunities. This deadly combination spells an end to more than its fair share of startups.

9. Where can I turn for mentorship and advice? There are lots of people who have done some aspect of what you're trying to achieve. They have the scars and stories to prove it. Learning from their mistakes and getting sound outside counsel will be a critical component to your success. Where are those people, and can you access them?

10. Who is going to handle accounting, taxation, finance, and operations? This is the most often overlooked aspect of entrepreneurship and creates massive headaches in short order. You need to have a good answer for who's handling these necessary functions.

These questions are to help you visualise the road ahead ensuring you don't get caught in a beautiful dream that turns into a living nightmare.

The need of the hour

Maya Sadasivan



"Social entrepreneurs are not content just to give a fish or teach how to fish. They will not rest until they have revolutionized the fishing industry."
Bill Drayton, CEO, chair and founder of Ashoka: Innovators for the Public

Social entrepreneurship is not a new concept. It has been around for more than fifty years. One does not prepare for it like one would for a business venture. It is a vocation...a calling. As today's youth, on their own initiative, take up the challenge to plot our country's social progress, my generation feels a return of faith in mankind in these troubled times.

Social entrepreneurship appeals to my two pronged belief – that self-help necessarily precedes supporting others and that self - help leads to guiding others towards self - help ... it is a social revolution of sorts that leads to self - sufficiency! Whether a developed country or a developing one, social entrepreneurship sets a faster pace for growth as the change often works to eliminate the root cause of the social issue. The social change inevitably furthers economic growth. There is no limit to the areas wherein social entrepreneurship can sow the seeds of growth and development. In a country like India, one cannot afford to focus on one issue at a time. The problems that plague our society are many; there is no one, single solution for all. And sometimes, one solution may not be enough for recurrent issues. Social entrepreneurs spearhead change at multiple levels in multiple fields – education, nutrition, health, employment. Undeniable that money is often the abracadabra that opens the doors to social change; so quintessential to a country's growth and development. However, it is a misconception that social endeavor needs money. We do not need money to make money – we need a spark of social awareness that results in a 'jagran' - a spark that gets people to utilize existing resources to create multifaceted solutions. One thing is for sure - a social entrepreneur's ideas are user-friendly, easy to understand and easily garner widespread support so that maximum number of local people will stand up and implement it. In other words, he's a role model who proves that citizens, who channel their passion into action, can do almost anything.

At ICICI Manipal Academy, one finds probationary officers of RIBM (Rural Inclusive and Banking Management), coming from a rural base, specifically joining the banking sector so as to take the bank to their village and facilitate growth and development. These 20-25 year olds seek the power of knowledge and networking to bring opportunity to the less fortunate yet more than capable people of their village!

And they make me wonder: what defines the social entrepreneur? Not degrees. Not money. It is one with a vision, an out-of-the-box thinking and gumption!

Nirmal Kumar, IIM Ahmedabad graduate.

Upset at having to haggle with an auto driver over the fare, he struck a deal with auto drivers outside the campus. Health and personal insurance cover and free newspapers – in return they will charge only by meter! And thus was born G – Auto, a 10,000 strong organization of autorickshaws in Gujarat.

On whether he regrets not having chosen the beaten path, Nirmal Kumar says, "Today, my batch mates want to emulate me, not the other way round".

NextDrop improves access to water for residents in urban India by a) providing residents access to timely and reliable information about piped water supply, and b) establishing a feedback loop to inform better water management for the water utility.

Residents like this information because it takes away the stress of guessing when the water will come next. Utilities like it because they can, for the first time, make data-driven distribution decisions. It was co-founded by Anu Sridharan.

Many a youth today seek to make life easy – by outsourcing problem-solving to others...parents, teachers, government, society! And then there is that segment of youth that seeks to make life better...They recognize a situation that is making life tougher than necessary, they look around for ways to better the situation, they involve people, turn existing resources into solutions and effect a self-sustaining system... somewhere along the way life becomes easier for the society! The need of the hour is attitude - a thought provoking Kennedy-esque 'ask not what your country can do for you – ask what you can do for your country'.

Maya is currently Assistant Professor with Manipal University, Bangalore Campus – training probationary officers of ICICI in behavioral skills. She has "Moved through life as a journalist, a teacher and now, a Life Skills' Coach. Through my journey I have found Best for life comes from being with the Gen Next!"

Prof. Satyajit Chakrabarti

Director – IEM, Kolkata , Co-founder – UEM, Jaipur

He has worked in TELUS as Project Manager and Developer Analyst in Canada. He has also co-founded numerous software based ventures. He has made an enormous contribution to the educational sector of India. **team.org** finds out what it takes to sustain a venture for 25 years.

“Entrepreneurship is a thought process. It is a way of life. Entrepreneurs are die hard optimists and positive thinkers. In my years, I have learnt that as an entrepreneur, one will constantly face problems. The challenge is, even after failing 50 times, one needs to have unending hope and faith that he succeed at the 51st time. The thrill of the challenge and the freedom to work is what drives an entrepreneur.

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. As an entrepreneur, I am driven by responsibility and discipline – even though I know I can take the day off when I want to – the ingrained ideals make me want to continue without a break. Normally entrepreneurs are workaholics who think about new ideas and ways to solve problems even during vacations.

Entrepreneurship is the only way to ensure a thriving economy and a developing society - entrepreneurs make things happen and create jobs that are the lifeline of any economy.

As our venture approaches 25 years, we can look back with satisfaction at the number of jobs we have created, the thousands of minds we have educated and shaped who are now working in top corporations and creating value for the economy and the country, the entrepreneurs we have created, the leaders who are contributing to the development of the country. We cannot stay complacent at the fact that there is so much more to be done - we have to continuously grow and innovate to ensure we can do more for the economy and the country - to create more jobs, to educate more enthusiastic minds and help more citizens of the country realize their dreams of becoming successful professionals.”



Aji Issac Matthew

Co-Founder @ TechShu

His first venture was Idealog which he started in his 2nd year of college with 4 of his batch-mates. He headed Grmtech for 5 years, then headed the digital marketing department at Digital Avenues Ltd.

As a child were you exposed to any entrepreneurial influences?

No not at all, I always thought that what will I invent, almost everything this world need is already invented, I am late by few years. During my college days I have done crazy things on my own like running a library, running a small School (only on Sunday) which all became successful. All these things helped me.

What does your average work day consist of?

A lot of fire fighting (biggest worry for any Entrepreneur, fire fighting don't add any value to the business but is essential for survival), people building (Transferring knowledge, challenging them to do more innovation and structural work), process (it should run as smooth as KFC or McDonald's, in a process, smooth and consistent), sales (what is selling and what is not selling, how to package it better etc), HR (What policies are needed, what more we can do for our team) and then project planning and client discussions.

What business achievement are you most proud of?

We have an amazing team, I think it is become a place where the best wants to join in, that's a great achievement as it will make a lot of things possible for us in the coming days.

Also some of the work that we have done is good for portfolio, it is helping us sell. I think our decision to use dropbox, Feng Office etc has turned out to be great decisions to organize the company.

What is the most important piece of advice you would give young entrepreneurs starting out today?

You must know what value you are going to add. This is the era of execution, one who knows how to execute better is going to win. Ideas have been explored, tested, be it retail, technology based ideas etc, the potential is there for sure but the leaders will be the ones who knows their subject well and can execute it to the best level. How you dream to go a bookstore where you choose your books easily, where customer service is great, a mobile which understands you, when it goes wrong the service is world standards. I have seen that with US companies, Amazon replaced Kindle in less than 4 days (Complete replace). I envy such perfection in processes, that's the opportunity. Start if you are going deep into execution, don't start just because you have some idea.



Funny side up ☺

Sagarica Brahma



“Life is a drama full of tragedy and comedy. You should learn to enjoy the comic episodes a little more.”

— Jeannette Walls

Back in the days when carrying notebooks was still cool, doodling on the back pages was one of my favourite ways to deal with boring classes. Jokes, plots, sub-plots would all be involved in creating pieces that would crack people up.

With all things going virtual, could doodling be left far behind?

Bitstrips lets you make your own one panel comics starring an avatar you created with your Facebook friends or comic strips just featuring yourself. There are tons of choices to make with this app using different templates and characters! The templates and situations are set, but a person can work around with the dialogues that make for really interesting and hilarious strips. Having a food fight, or pulling pranks on friends, or throwing a basket of cats on someone can all become funny if the words for the strips are chosen carefully. More than that, real life incidences can also become a part of the jokes you share with friends in your virtual world. The customised facial details, clothes and even accessories make the avatar a complete look-alike of one's self.

I even managed to get most of my friends hooked on to it and creating virtual comics has become the new “fad” for them.

Most Facebook apps are about as exciting as

watching paint dry, minus the high from the fumes. Many demand you tell your friends about your harvest, then make you wait 8 hours before you can use the app again. Bitstrips doesn't do that. I can make comics at my own pace, whenever I want to, Moreover, I don't have to do repetitive tasks in order to advance in the app, and hence, making these strips is pretty darn easy and fun. To top that, the final product always looks great. The character and scene designs are phenomenal. The art has a great sense of style to it. It is amazing how cool these look as fully-realized, animated characters. It rarely becomes frustrating, and the amount of options they offer you gives it an insanely high replay value, as long as you have ideas.

From making fun of your friends to making people laugh at your antics, it is just simple fun. It takes a leaf out of our life and helps us enjoy it in a lighter mood. So whenever I get any interesting story or situation to share, I can do that by creating a Bitstrip comic.

However, there is a fine line between being funny or sarcastic and downright degrading, which people need to tread carefully.

The virtual world is powerful enough to disrupt life in the real world. Yes it is fun, but that doesn't mean you get to insult friends and people in public.

All said and done, I am going to use it while it's still trendy and till something better is launched!!!

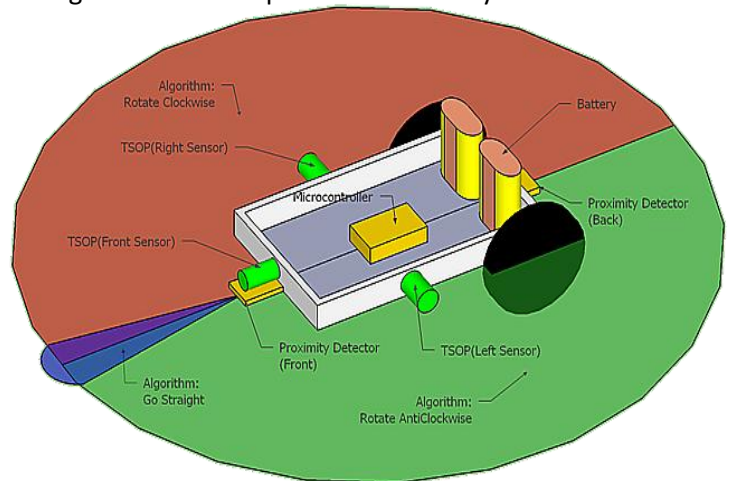
Sagarica is a final year ECE student of IEM and claims to be a raging facebook junkie when she's not engrossed in her romance novels.



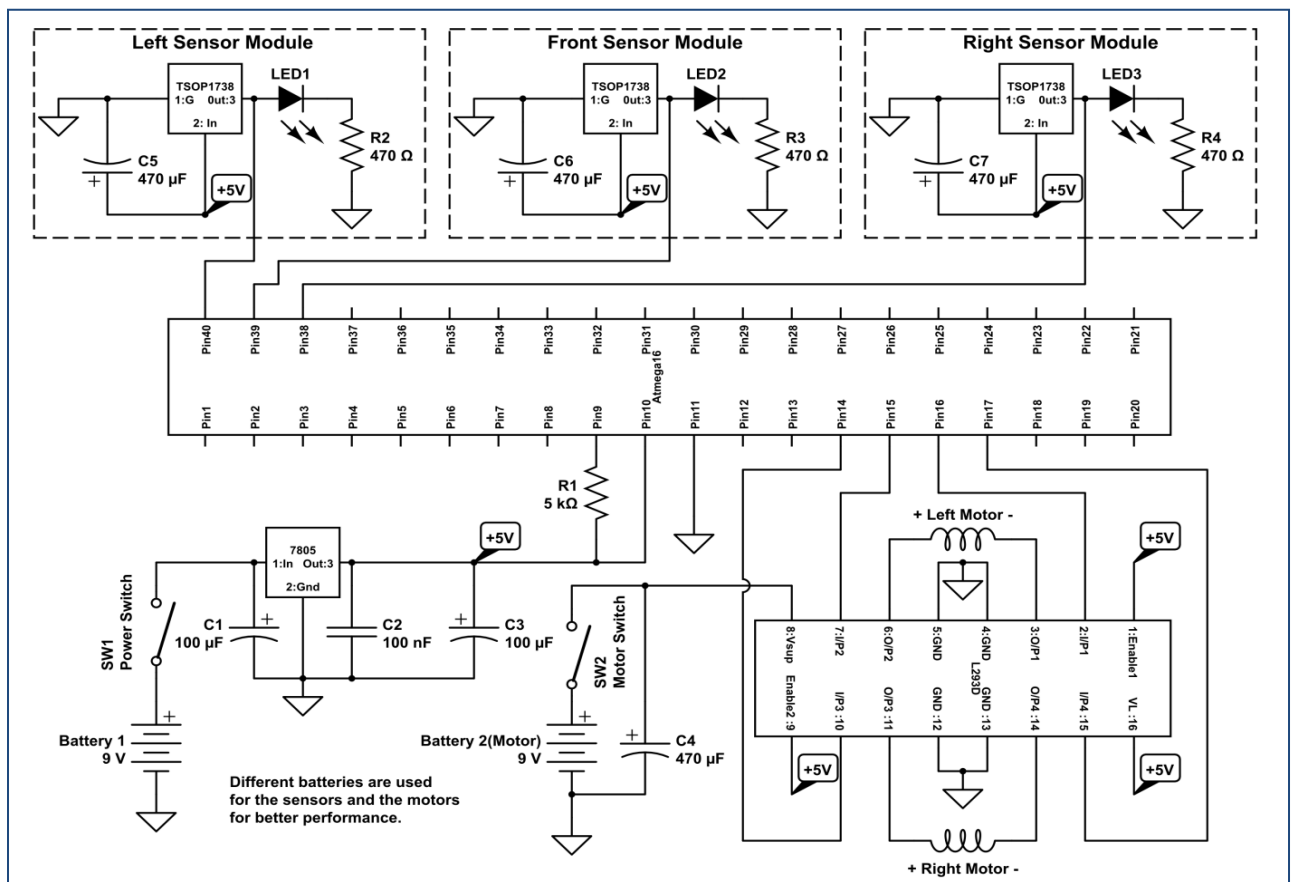
Target Following Autonomous Robot (TFAR)

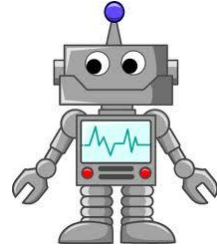
Build a cool robot which will follow you (or any other target) everywhere! That too using simple, readily available parts. No prior programming knowledge or robotics experience necessary!

A signal source (an infra-red transmitter) is attached to the target and three signal sensors are attached to the robot. Using these sensors, the robot determines the precise angle of the target (i.e. the transmitter) and moves in that direction.



Step 1: Build the circuit:





Step 2: The Transmitter & Receiver:

To make the target's transmitter, any ordinary TV remote control can be used! You'll just have to keep any button pressed to make the robot follow you. (Optionally, you can make your own transmitter by building a 38 kHz IR modulation circuit using two 555 timers). The receiver is a TSOP1738 IC as shown in the circuit diagram. It senses the 38 kHz IR signals emitted by the transmitter.

Step 3: Mechanical Construction:

It's very important to restrict the angle of reception for the 3 TSOP sensors. Black tape or a mechanical housing can be used for the covering and slits should be made such that the following reception angles are achieved: *Front Sensor*– 15 to 25°, *Left and Right Sensors*– 180°; refer to the coloured regions (blue, green and red) shown in the bot diagram.

Step 4: Programming the Microcontroller:

Download the program (hex file) from the GDrive link (given at the end of this article), and burn it on the microcontroller (Atmega16), using a software like *eXtreme Burner* via an AVR programming cable. The algorithm is very simple: it first scans the three sensors for a signal, and if the front sensor detects it, then it moves forward. Otherwise, it rotates clockwise/anticlockwise corresponding to the right/left TSOP sensor.

And that's it - a fully functional TFAR using minimal components! If you build it, you'll notice one *problem* though - it follows *too well!* i.e. it will always *hit* the target and won't know where to stop. To overcome this problem and also add more features (like obstacle avoidance) don't forget to read the next instalment in this series: TFAR v2.0!

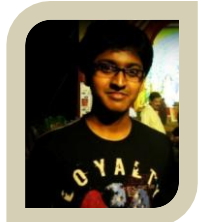


Visit this project's Google Drive URL : <http://goo.gl/iecZc> (or scan the QR code on the left) to download the program, circuit diagram, datasheets, and additional info.

Saurav is a final year ECE student of IEM and doesn't let his schooling interfere with his education. In the nap breaks from his duties as a virtual dragon slayer, he likes to rip apart perfectly working electronic gadgets.

Frenemies – keep your enemies closer

Roshwin Sengupta



'Keeping your friends close, enemies closer' may sound ironic, it is very true indeed. For, it would be naïve of us to think that we live in an idyllic world. The world out there is a cold, dark one - shrouded by mist of pain, mistrust and betrayal. The business world is waiting out there with its jaws open to tear one apart, lambasting one at the very first mistake one makes, however trivial that may be. Success may not win friends, but will not fail you to win enemies. These enemies do not leave any stone unturned to embarrass us, even going all the way to dig up the past to find any dirt. Lamenting at the situation won't help to keep us alive.

Once success fades, friends and families may drift away, but enemies just don't let go till you're back to rags.

But what can one possibly do then? CIA or RAW won't be there to keep an eye on our enemies, even though to us our own security may be of more importance than that at the national level, or even that of the head of the country. One way out would be to take a leaf out of Sherlock and put on our detective hats. But maintaining such a vigilant front constantly is no mean task. So, the best way out would be to keep doing our own jobs, but keeping tabs on our enemies all the while. We have to watch them closely, even closer than our friends.

Roshwin is a second year ECE student of IEM who says his 20 years of wisdom have been gained more by accidents than by convention. He's a self confessed die-hard romantic and prefers to be absorbed in story books in his spare time.

Because true friends won't backstab us, but our enemies would be waiting for just that one chance to make us bite the dust.

Definitely, we need friends to be close, to share a laugh, celebrate success together, shed a tear together, share the pain and also for coaxing them to throw us a treat every now and then. So keeping friends close to one's heart is perfectly understandable. But then again, that does not mean we do not need to keep an eye on our enemies. We have to learn to think the way they think, correctly guessing their next moves, learning their strategies, beating them at every race - maybe even planting an idea in their minds that would prove beneficial to us - "Inception" style!

We must use their own weapons against them, learning the tricks they were going to use to make us fall, and then using those very tricks to crush our enemies beneath our feet.

For that, we need to keep our enemies close - closer than our friends. One cannot shun this harsh reality and live a secluded life. We have to embrace it, learning the tricks to stay alive and be successful. Only toiling hard doesn't help one to reach the top of the power pyramid, as there will hurdles set by one's enemies all along every path, and pitfalls around every corner. One false step, and we tumble and fall right down. But we cannot afford to fall, as we might not have the time or resources to rise again from the ashes. We have to face our fears and embrace our enemies - that's pretty much the only way to stay on board – if not happily then successfully at least.

It's a professional world – you can be a friend ,as long as you're on the other



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Mr. *Arun Pandit* has been working with RPG enterprises since 2012 after having done his post-graduate MBA from IIFT. He is also the founder of dontgiveupworld.com, India's largest motivational website. Finding what motivates you in a difficult time is never easy – his website explores all options.

Here is a motivational story from his website :

Always Find The Best Qualities In Others...A Short Story

When John D Rockefeller ran the Standard Oil Company, one of his senior executives made a mistake that cost over \$2 million.

The other executives thought Rockefeller would come down heavy on him and probably fire him. But he didn't. Before he called the man in, he sat down, took a notepad and wrote across the top of it: 'Points in favour of this man'. Then he listed the man's strengths, including how he'd once helped the company make the right decision and earn them millions of dollars.

One of the senior executives who witnessed it later said, 'Whenever I am tempted to rip into someone,

I force myself to sit down and compile a list of the good qualities they have.

By the time I have finished, I have the right perspective. And best of all, my anger is under control. I can't tell you how many times this habit has prevented me from committing one of life's costliest mistakes-losing my temper. I recommend it to anyone who must deal with people.

So before you jump to conclusions about someone, stop and ask God for wisdom, then sit down and make a list of their best qualities. If you do you may come to a different conclusion. One thing is for sure, you'll approach them with the right attitude and you won't say things you'll later regret.





A New King – S IV v/s Sony Xperia Z v/s HTC One

A new year, a new Galaxy. Samsung has finally unveiled the successor to their best selling Galaxy S3 Android smartphone, and while not carrying a fancy new face like the trend with the past three flagships, Samsung has gone the Apple way by making subtle design changes instead, and focusing more on the core experience with its software customization. 2 years ago, who would have thought any other company would follow in the footsteps of Apple (albeit in a different style), yet here they are, Samsung at the top of the world's smartphone

manufacturers.

Borrowing heavily from the previous flagship, the Galaxy S IV is a familiar face with refreshed specifications that make it ready enough to take on the heavy weights that will be released throughout 2013 (or for most of it). The Galaxy S IV will come in two distinct flavours, one donning the Samsung made Exynos 5 Octa chipset, while some regions will receive the new Qualcomm Snapdragon 600 chipset.

	Samsung Galaxy S IV	Sony Xperia Z	HTC One
Chipset	Samsung Exynos 5 Octa	Qualcomm Snapdragon S4 Pro	Qualcomm Snapdragon APQ8064T
CPU	1.6 GHz quad core ARM Cortex A15, 1.2 GHz quad core ARM Cortex A7	1.5 GHz quad core Krait CPU	1.7 GHz quad core Krait 300 CPU
GPU	PowerVR SGX544 MP3	Adreno 320 GPU	Adreno 320 GPU
RAM	2 GB of RAM	2 GB of RAM	2 GB of RAM
Display	5" Super AMOLED	5" TFT, Mobile Bravia Engine 2	4.7" SLCD3 display,
Display Resolution	1080p (1920*1080) pixels	1080p (1920*1080) pixels	1080p (1920*1080) pixels, 469 ppi pixels density
Rear Camera	13 MP camera, auto focus, LED flash	13 MP Exmor RS sensor	4 MP ULTRA PIXELS rear camera, auto focus and LED flash
Video	1080p @ 30 fps	1080p @ 30 fps	1080p @ 30 fps, HDR
Front Camera	2 MP, 1080p @ 30 fps	2 MP, 1080p @ 30 fps	2.1 MP, 1080p video @ 30 fps, HDR
Storage (Internal)	16 / 32 / 64 GB of internal storage	16 GB of internal storage	32 /64 GB of internal storage
Storage (External)	expandable via micro SD card upto 64 GB	expandable via micro SD card upto 32 GB	expandable storage via microSD card up to 32 GB
Battery	2,600 mAh Li-Ion battery	2,330 mAh Li-Ion battery	2,300 mAh non-removable Li-Po battery
Dimensions	136.6 x 69.8 x 7.9 mm	139 x 71 x 7.9 mm	137.4 x 68.2 x 9.3 mm
Weight	130 grams	146 grams	143 grams
Operating System	Android 4.2.2 Jelly Bean	Android 4.1.2 Jelly Bean	Android 4.1.2 Jelly Bean
UI	TouchWiz	SocialLife	Sense



Benchmarks

It was always known that the Galaxy S IV would be a big scorer in benchmarks. Moreover, it seems that Samsung won't let its 4G capable Snapdragon 600 chipset based variant lower the overalls, with the Galaxy S IV scoring high enough to beat out old champions such as the Galaxy S3, iPhone 5 and even the newly introduced HTC One (which is also based on a Snapdragon 600 chipset).

It's real nice to see that the Snapdragon 600 based Galaxy S IV will also be a benchmark (and otherwise) monster of a phone. That's certainly good news for all people awaiting the market launch of the device.

	Samsung Galaxy S4 Qualcomm Snapdragon 600 @ 1.9 GHz (4 cores)	3163
	HTC One Qualcomm Snapdragon 600 @ 1.7 GHz (4 cores)	2687
	LG Nexus 4 Qualcomm Snapdragon APQ8064 @ 1.5 GHz (4 cores)	2040
	Samsung Galaxy S3 Samsung Exynos 4412 @ 1.4 GHz (4 cores)	1717
	iPhone 5 Apple A6 @ 1.3 GHz (2 cores)	1596
	BlackBerry Z10 Qualcomm Snapdragon MSM8960 @ 1.5 GHz (2 cores)	1480

Preetam is a student of ECE at Manipal Institute of Technology, Manipal and writes for www.gadgetronica.com & www.techenclave.com. He claims to be a lazy work-a-holic and we are advised to take this statement seriously.



Binayak Chandra

HP Envy Series of Laptops

HP originally launched the line on October 15, 2009 with two high performance models, the Envy 13 and the Envy 15. These models replaced the Voodoo Envy when HP and VoodooPC merged. After that, HP expanded the series with the addition of the Envy 14 and Envy 17 models. In 2012, HP discontinued their traditional Envy 13, 14, 15 and 17 models by rebranding their Pavilion line of computers as the new Envy lineup. The new ENVY line has a starting price of ₹ 45k, and consists of the (rebranded Pavilion) Envy notebook line and the hybrid HP Envy x2. The rebranded Pavilion laptops continue with Beats Audio branded speakers and dedicated NVIDIA graphic processors.

Ultrabook

There are three Ultrabooks in the early 2013 ENVY lineup - the ENVY 4 TouchSmart, ENVY 4, and ENVY 6.

Envy X2

The HP ENVY X2 is a tablet with a removable keyboard dock and costs around ₹ 58k-60k.

Envy Dv6

The Envy Dv6 is a 15.6-inch laptop priced at ₹ 64k-68k that resembles the previous Pavilion Dv6. It weighs ~5 pounds and can be customized to accommodate a 1080p TN matte display, multi-touch trackpad, and up to 1.5TB HDD. The HP Envy Dv6 runs Windows 8 and is replacement to the successful HP Envy 15. The Dv6 can

be configured to have an Intel Core i7 Mobile processor, Up to NVIDIA GT650M graphics and a backlit keyboard. The Dv6 comes with beats audio and has a mostly aluminium chassis. There are two main variants of the Dv6, the Dv6 comes with AMD processors while the Dv6t come with Intel processors.

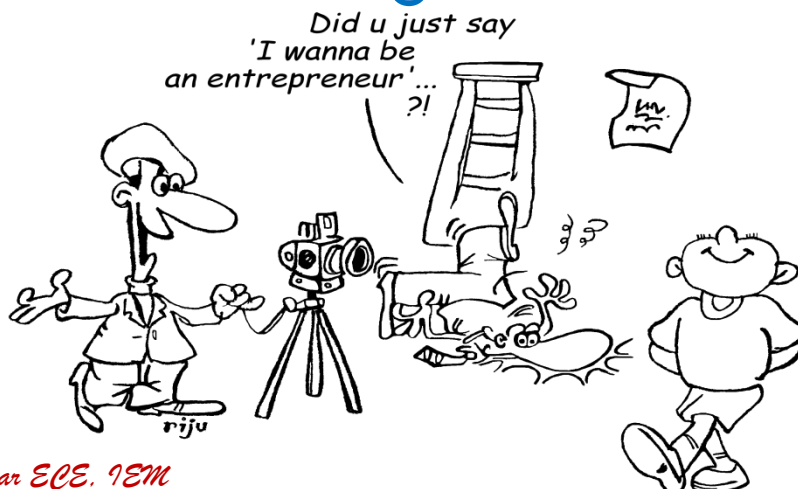
Envy Dv7

The Envy Dv7 is a high-end 17.3-inch laptop priced at ₹ 72k-80k (for the high end variant) that resembles the previous Pavilion Dv7. It weighs ~6 pounds and can be customized to accommodate a 1080p TN matte display, multi-touch track-pad, and can hold two hard drives (Up to 1 TB each when bought from HP). The HP Envy Dv7 runs Windows 8 and is replacement to the successful HP Envy 17. The Dv7 can be configured to have an Intel Core i7 Mobile processor, Up to NVIDIA GT650M graphics and a backlit keyboard. The Dv7 comes with Beats Audio and has an aluminium chassis. There are two main variants of the Dv7; the Dv7z has AMD processors while the Dv7t come with more powerful Intel processors.

User review

HP ENVY X2 turns out to be a dream come true for me. It's the first of its kind, a hybrid between laptops and palmtops. Its detachable keyboard dock makes it a stunner with techies. Take it from me folks, if you are looking for a blend of innovation and technology, nothing will suit you better than ENVY 2. Showing off in front of buddies or impressing or girlfriend is easy if you have one of these in hand.

Binayak is a second year ECE student of IEM and lives with 3 dogs, 6 birds and 2 huge aquariums.



Rajanshi Das, 2nd year ECE, IEM



This competition was held earlier this year as "Shoot Me".
The theme was "People at work". Here are some of the best entries:



Poor ill-fed labours working hard for others' food - Riya Sett



"My life revolves around you..." - Arijit Basu



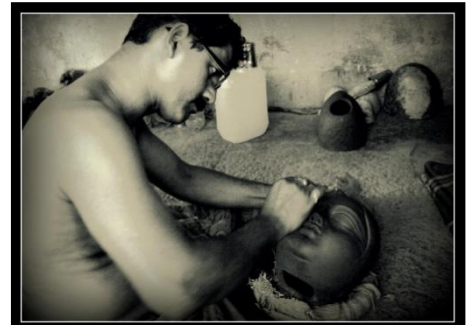
Obsessed In Oblivion - Diptarka Saha



Poronto Bikel - Arif Aziz



"Making of Cottage-cheese for making sweets - Soham Talukdar



The essence of Kumartuli in his gifted artistic hands - Somjit Bhowmick



Emptiness while people are out for work - Soumyadip Ghosh



ARADHANA - Sounak Lahiri



The never ending line with never ending effort of humans auto walas Without them the roads of Kolkata are all empty - Shubhoday Moitra

The topic for the next issue is "Construction sites". Mail in your entries to iem.ecell@gmail.com

Are you risking your success?

People varying from students and professors to venture capitalists and entrepreneurs make some very common mistakes. Regardless of age, stage, or profession, the little things these very different people do might amaze you.

1. Grammar: While it may look insignificant, misspellings, lack of capitalization, and generally poor grammar say you're uneducated, inattentive to detail, or, frankly, just don't care. Poor grammar is like a giant fluorescent warning sign that says: "Steer clear." Please use spell-check tools, re-read your note, and if it's something "important," have others proof read it, too.

3. Back-biting: You back-bite about someone else to me, I wonder what about me will you back-bite to others. You openly criticize your last company to me and I wonder which trade-secrets about my company you would be leaking next. Unless there's a material breach of ethics involved, keep your tap shut.

5. The Blame Game: We're human. Mistakes happen. But ever noticed how some people always have a scapegoat and even a backup scapegoat? Occasionally, another person might have played a role. Most of the time, it's your own fault. Own it.

7. Committing Beyond Capacity: While it may seem tempting to say 'yes' to every commitment you are offered, it is wise to choose. Saying 'yes' to something must mean you are saying 'no' to something else because unless you are 'Superman' you can't accomplish it all. Come to think of it, even he couldn't accomplish everything.

9. Subtraction by Addition: When things get hard, the inclination is to do more. Work more hours. Demand more from others. In the short term, it feels great. Your brain rewards you for "doing more." But when you look back, you'll find you accomplished less. Instead, focus on addition by subtraction. Spend more time thinking, and less time doing. Be still. Be alone. Be thoughtful.

2. Irresponsibility: Even the best of us sometimes can't live up to our own words. But if it happens on a regular basis, chances are, you're either disorganized or a megalomaniac. Either way, it's a deal breaker. And no, your constant string of excuses doesn't help. Just do what you said you would when you said you'd do it.

4. Realistic Promises: Expectations matter. If you promise me a miracle, I'll expect it. If you promise me a little, I'll be happy with a little and delighted with a little more. Being impressive is mostly about being reasonable in your projections and hitting them consistently. The expectations you project can make or break you.

6. Impatience: Ever heard that there are no shortcuts to success. Guess what? It's 100% true. Nothing worthwhile comes quickly or easily. Regardless of your goals, they will take focus, hard work, and plenty of time. So stop looking for the secret sauce or the quick fix. There aren't any.

8. Choose Wisely: Even seemingly small choices matter. Saying something is okay this one time never works. You will never realize when it goes from being that one time to a life-long regret. It is said that asking yourself what 20-years-later-yourself would think of your decision can aid in clearing the confusion.

10. Stop Exaggerating: Most, it seems, have a flair for the dramatic. The temperature is always five degrees warmer or cooler than the forecast. Employee count, revenue, or profits are a multiple of the reality. This is wildly unhealthy and quickly destroys trust. Just be honest and confident. Stop comparing yourself, and be grateful for whatever you actually have.

Each of these mistakes are easy to make and even easier to keep making. But sometimes, being aware just might help.

*Send in your reviews, queries,
articles and photographs
to iem.ecell@gmail.com*

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