



Frequently Asked Questions on Studying Abroad

A booklet prepared by the Students and Alumni

College of Engineering, Chengannur

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How-to

Following the Google Hangouts session on 8th February, 2014, the following questions were posted onto the Facebook group of Alumni of College of Engineering, Chengannur. The answers have been compiled and are listed below. Answers will be denoted by short-key in the following order;

Name of Person	Short-Key
<i>Vinod Kumar</i>	VK
<i>Deepak Mohan</i>	DM
<i>Dinup</i>	DP
<i>Sandhya Prabhakaran</i>	SP
<i>Amal Krishnan</i>	AK
<i>Harishankar Janardhanan</i>	HJ
<i>Tom</i>	TM
<i>Anil Ramachandran</i>	AR
<i>Githin Alapatt</i>	GA
<i>Arvind Ramanathan</i>	ARV
<i>Lakshmi</i>	LK

Frequently Asked Questions

1. Which University did you attend? Which program?

VK	Columbia University, MS, continuing to PhD program.
DM	MS EE - University of Missouri Rolla
DP	Nan yang technological university, Singapore Master of Engineering(M.Eng) Integrated circuit design (IC design)
SP	2007-08 University of Edinburgh, Scotland, UK MSc in Artificial Intelligence. Major in Intelligent Robotics, Minor - Learning from Data 2009-14 University of Basel, Switzerland (PhD in Mathematics and Computer Science). Subject: Machine Learning/Applied Statistics)
AK	MS in Information Security at Carnegie Mellon University, 2012
HJ	University of Texas at Dallas Computer Engineering (MS)
TM	University of Arizona (USA)
AR	MS Computer Engineering, University Missouri - Rolla (now renamed to Missouri University of Science and Technology)
GA	Clemson. Microelectronics. PhD
ARV	University of Texas - MS Computer Science Kellogg School of Management, Northwestern University- MBA
LK	University of Birmingham, Masters in Computer Science

2. What are the main challenges for Indian students who study abroad?

VK	<p>Academically, it was very different for me and hence stressful. But as much as it was a challenge, it was also the reason why I was here in the first place. Once you gets the knack of it, you'll realize the perks of it and try to make use of the flexibility in taking classes that most universities offer.</p> <p>Life --- depends where your University is. Mine is in NYC -- so no complaints. ;)</p> <p>Food --- you'll learn to cook well or you'll learn to live well with what you cook. :)</p> <p>Climate --- the hardest for most.</p>
DM	Academics may look easy compared to the B. Tech workloads but if not can lose track. Food, lifestyle and climate will be different for sure. None of those are hard, it's just a matter of getting used to things.
DP	Academics and money.
SP	<p>Academic - I realized that the CEC Bachelors course dealt with everything but nothing in depth. The 'why' aspect lacked with many courses. Fundamentals in Physics or Mathematics are essential no matter what stream of Engineering one does. I felt the lack of fundamentals from Day 1 of the Masters. So you have to work twice as hard as the other students. As a mere example, compare the syllabi of Math Tripos or IIT Computer Science and you can see very clearly where our CEC B. Tech syllabus stands. I refer to the 2001 syllabus. I do not know if the syllabus has been progressively revamped. If not, then it is high time.</p> <p>Life, Food, Climate are not to be worried about so much. As humans we have the gift to adapt. Learn to interact with other nationalities also to open your mind and broaden your perspective. Do not 'always' stick within Indian circles. It will simply kill the purpose of having gone abroad. Explore and experiment. One life, live it.</p>

<i>AK</i>	I fit right in! Managing expenses was a challenge, but part-time jobs and internships helped. If you're a vegetarian, I hope you convert soon :)
<i>HJ</i>	<p>We can adapt to almost anything. But , a very important thing I see about Indian students are that they are willing to do anything to get "grades" - cheat in exams, projects, etc. It defeats the purpose of pursuing higher education.</p> <p>Word of advice: Be prepared to work on your own. The education is well designed to give you maximum benefits that way</p>
<i>AR</i>	<p>Academic: At CEC, all the studying happens the day before the exam. That will simply not work here. You have to put in effort after each class. The good news is, you spend only 9 or 12 hours in class a week. You have lots of time. Use it effectively.</p> <p>Life: The first couple of months can be hard since you will be homesick, especially if you land in Winter like I did. But there are others like you everywhere and you will form very strong bonds with them for life.</p> <p>Food: You get everything here. You will learn to cook.</p> <p>Climate: Try not to start in Spring. Winters can be horrible. It is not like the slight chill you feel in hill station areas. This is downright bone-chilling cold. This winter has been especially bad. Snow looks fun, but not when it mixes with ice and water and dirt and forms a slurry that you have to walk through to get to your car.</p>
<i>GA</i>	<p>Most of us come from a system that does not focus on knowledge - but studying for exams. This has to change. Understanding fundamentals. We have to compete with students of NIT and IITs once you get here. They have a big brand name to boast about. But, also many of them know their core subjects very well. One must take extra effort to understand core areas. Use only high quality text books. Solve problems on the back after each chapters. Understand a lot of things. Try to do a project and publish papers. This is VERY important. Helps to get an admission easily. Must be in good conference or a journal. Even bad conferences may give you some advantage. Try best to publish.</p> <p>We get used to everything else pretty easily. Also learn to speak and WRITE better. It's tough to build this talent sitting there. But try.</p>
<i>ARV</i>	<p>Initially you will encounter a culture shock which everyone will need to go through. Humans are amazing in adapting to different circumstances so you will quickly realign yourself. If you live in the north east or Midwest US, weather will be a serious factor with hot summers and brutal winters. Culturally the school will offer a very fostering and collaborative environment that will encourage teamwork. Plagiarism is a big No No and everything that you do has to be original work.</p>
<i>LK</i>	<p>Everything is different from climate to food to people. Always expect a culture shock when you step in, But all universities are very warm and friendly so it's very easy to overcome those challenges. And with academics it is hectic and not that easy as back home because you are definitely not just reading books.</p>

3. Why is US preferred over other countries like Germany and Singapore?

VK	More opportunities may be?
DM	I would say because of the equal opportunities it offers for a foreign national than many other countries.
DP	Better job opportunities.
SP	1) It is an effect of 'follow the crowd' mentality. 2) More opportunities. US is a far bigger country when compared to Germany and Singapore, so of course US will have more educational institutions catering to various fields and therefore more competition. But this does not mean other countries are behind. Quality education/research can be found in Europe, Canada, Australia, Singapore etc.
AK	It depends. If I want to work on cars, I'd go to Germany. If I want to work on Privacy, I'd go to Switzerland.
HJ	No black and white answer. You want automobiles, you go to Germany. (you get the idea) Usually US would be preferred because of the quality of education and number of jobs available.
AR	In US, the standard of education is very high across the top 200 schools. I am sure the top schools in Germany or Singapore are just as good, but will you be going to a top school? With US, even the 100th or 150th ranked school is absolutely rock solid in teaching and research. Moreover, with US, you get to cherry pick the school based on your specific area of interest.
GA	US - most jobs. Biggest economy. Top research and development. It's changing slowly. I would look at China also. But, cultural issues...
ARV	It's only a preference. Schools in these countries will be good too. Intact more students opt for Singapore because of its quality and proximity to India and lower costs. Germany, I am not sure of but there may be language barriers.
LK	They have more universities and hence more chances of making it into a good university. Singapore has just 2 universities and they have high preference for south east Asian communities.

4. How important was your B. Tech percentage?

VK	VERY! At least in my case. Some schools, usually the good ones, are very academic centric. For them GRE serves as a filtering criteria and acads + projects + research/publications + reccos + SOP become the selection criteria. However, having a lower acad doesn't necessarily throw you out of the bucket if you have other impressive things in your profile.
DM	While important, it is not the most important factor.
SP	Played a role but more important is 'what' knowledge one has acquired in the 4 years of B. Tech.
AK	I think it was pretty important. When you're applying to good schools, they want to see that you are a consistent performer.
HJ	The formula for admission for colleges differ. Some give more weight to GRE/TOEFL and others to B. Tech scores. It shouldn't be too much of a deterrent unless your scores are real bad. (On a humorous note, CUSAT screws up with most anyway) Just do your research about what your profile can get you. I believe msinus.com is the site. Or better yet, edulix
TM	It is good to have a decent percentage to get admission. But, there are other many factors like work experience, GRE score, TOEFL score, letter of recommendation, how good your STATEMENT OF PURPOSE is etc. So don't worry if you haven't scored much in your engineering studies. You can make up for that in other sections.
AR	I wouldn't know. I applied to six universities and was rejected by only one. It's hard to know how the low CUSAT %s hurt us in this process.
GA	Very very important. This is the most important thing. As long as this is good, you are in a good situation. If this is not great, you will have to play with it.

ARV	It counts quite a bit. Schools definitely consider your scholastic aptitude to determine if you will add value in a classroom. Remember they have fixed slots for international students during an admission semester and you will compete with other Indian, Chinese, Pilipino and other nationalities for that seat. Your academics, extra-curriculum activities, writing skills, GRE and recommendation letters will give the admissions committee a good overall idea on your candidature.
LK	It is very important in actually choosing your choice of university. It also plays a very significant role in getting studentships and other funding.

5. Did your B. Tech project play a good role in your selection through GRE?

VK	Not sure.
DM	Not really.
DP	No. I had a work experience of 4.5 years when I got admission through gate. So industry projects lead my resume.
AK	Maybe? I had other fancy projects at work though.
HJ	None whatsoever
TM	No
AR	It is possible. Again, I wouldn't know.
GA	No
ARV	No. Doesn't really matter.
LK	I'm not very sure of that but I think this factor was not heavily weighed.

6. Apart from GRE, is there any other way one can get MS/PhD admission abroad?

VK	As long as abroad=US, a university that do not require GRE is probably a university that's not worth going to, unless you just want to get to US in any which way! I think GRE being mandatory is mainly only for US univs. I could be wrong.
DM	Applying from India, the answer will be No.
DP	I got admission at NTU with gate score. Universities in Singapore NUS and NTU accept gate scores for research courses -M.Eng and PhD.
SP	Yes, TOEFL or IELTS or University-specific entry requirements.
AK	I think a few universities in the US like MIT and Purdue don't require you to do GRE for a few MS/PhD programs. I would be wary of taking shortcuts. Keep in mind that you are signing up 2-6 years of your life doing things that are exponentially harder than the GRE in grad school. Don't be afraid of the GRE and limit your options.
HJ	For the most part, I do not think so. But don't quote me on this one
TM	Yes. GRE is a must only for universities in the US. You can study in Australia, Canada, and Germany etc. without writing GRE. However an English proficiency test like TOEFL/IELTS needs to be taken to get admission.
AR	GRE gives you access to US universities. I believe you have other options for universities in AUS, UK, or EU.
GA	Not in most of the "good" schools in USA. GRE is not that difficult to worry about it.
ARV	There probably are a few schools that may not require GRE but I would be very skeptical of those programs. Most good programs require a GRE and TOEFL.
LK	Depends on the country you want to go to. Some take just your English language proficiency and some even the GATE results

7. *Did you receive any scholarship? Could you please tell us how to get one and what all to be taken care of while applying?*

VK	Depends from school to school. In the recent years, getting a scholarship in the first semester is increasingly rare. But students often work with professors for research credits (which they can utilize towards the degree) and end up bagging funding, if available, for the second/third semester onwards.
DM	I got a Research assistant-ship after I joined the program. Normally the professor will ask you to enroll in his class so that he can assess you before offering some sort of assistant-ship. The other type of scholarship that comes along with admissions are mostly based on your GRE scores and prior work experience.
DP	Yes. All research courses (M.Eng & PhD) in Singapore universities are covered by scholarship- full fees with healthy monthly stipend. Intact research course admissions are limited by funding. A good academics plus GRE and work experience will help you get an admission. Contact a professor directly and express your interest in working with him in his research areas.
SP	Yes, I was the recipient of the Scottish International Scholarship Program (SISP). It was a fully-funded scholarship for Master programs in the UK. It was part of the Fresh Talent initiative from the Scottish Government and deployed through the British Council. Scholarships are in general competitive and depending on the place one chooses, it can be very cut-throat. Keep your eyes open for scholarship calls and start the preparations well in advance.
AK	Yes. I depends on the school you are applying to.
HJ	Nope. You could get one with exceptional acad. But, you have to retain it after coming here through your work quality.
TM	It is easy to get GA/TA after coming to universities in the US which reduces the fees we need to pay by a huge amount. This pays us decently enough to manage our monthly expenses too.
AR	I got an out of state fee waiver for the first semester and was funded starting the next semester. The question here is a little bit tricky. The area you may want to work in may not be funded in your school. There may be funding in another area. If you can afford it, it would be a great idea to work in your area of interest with no funding. If you can get funded as well, great. If finances are your concern, and you are not too picky about your area, focus on the area that is funded. Read up about the professor's work. Here's a trick: Try dropping email AND snail mail to your target professors before you join, just introducing yourself, and just asking for a meeting to discuss recommendations for career progression. Show up to the meeting (if you get one) prepared. Make sure you do your homework and impress. You can meet multiple professors but if you look from the other side, every professor gets several students fresh out of school coming for MS walking in and asking for funding. I would say, don't worry about funding, ask for an opportunity to work on something for a semester. Find out what projects they have and ask to work on something or assist someone. Learn on the job. Funding will come.
GA	Depends from place to place. I got one after I was here for a few months. The professor who was teaching the course was impressed by what I already knew. Also, it's about being in the right place at the right time. When you get here, look around and look at areas in which there are lots of funding - may not be a bad thing to shift focus a little bit.
ARV	Do not expect schools to give you scholarships right away. Most of them you can discover after reaching the school. Be ready to pay for a semester or two before landing a scholarship. Assistant ship or grant.
LK	Yes I got a studentship from my school. The first level screening was based on the academics and there was a questionnaire section after that. While applying for scholarship you have to make sure you convey your deepest desire to join the institution and the course. Any achievements, work experience and certifications are considered while awarding the scholarships.

8. Why did you choose MS abroad over M. Tech in India?

VK	Back when I took that decision, I was mainly driven by a senior's advice that even a top-20/30 US university would be better option than top M. Tech universities (including IITs). Now when I look back, I can vouch for that in terms of facilities, exposure to research, and opportunities after completion and so on. Maybe things have changed in the last 10 yrs.
DM	Better quality, reputation, exposure and better opportunities
DP	M.Eng is master's by research course and in Singapore universities(NTU & NUS) research courses such as M.Eng and PhD are covered by scholarship- full fees plus healthy monthly stipend. Also Singapore universities are cash rich to fund for the projects and equipment and facilities...
SP	Wanted to have higher education experience abroad.
AK	I'll be really candid with this one. The CS education system in the US is way better than the Indian system. Also, the best people in my industry were based out of the US.
HJ	A different experience in education More areas of research Better jobs (compared to the outsourced ones that reach India)
TM	For the better opportunities it offers than doing Mtech in an India offers. Moreover the program I was interested in is not offered in India.
AR	I guess I did not really evaluate MTech in India comprehensively. However, in hindsight, I got the feeling that MS in US was more oriented at making sure you understood concepts, with testing and assignments throughout, not just as a way to grade you but also to make sure you are keeping up. The class time expectation was limited to say 3 hours per week per course, and you would take 3-4 courses at a time, the expectation was that you spent 2x class time on each course outside of class. I would ask someone who chose the MTech route if this holds true for MTech.
GA	The real industry in microelectronics as far as R&D is concerned is out here in the US. All the exciting stuff happens here. Need to see the world when young. New ideas. Better opportunities.
ARV	Better research options, global class environment, infrastructure is way better and chance to work with top researchers, professors and collaborators.
LK	International exposure and excellent faculty

9. What is the approximate cost of the entire program (including VISA, GRE, till the end)

VK	Depends on univ. Mine was about 15-16 lakh (including tuition, flight, GRE and VISA expenses). But I got funding from my third semester onwards.
DM	2005-2007 around USD 10K
DP	Scholarship covered all expenses in my case
AK	Depends on the school and program. It can vary between 5 lakhs (tuition free PhD with stipend) to 50/60 lakhs.
HJ	I do not remember the exact figures. But you need the money for sending transcripts from CUSAT, VISA appointment, GRE (10000 I think), TOEFL, extra correspondence with universities To be honest, and an expensive deal. But the education is worth it.
AR	I'm going to guess here a little bit. With no funding and paying out of state fees, a school like I went to (ranked about ~80-90) would be about \$32000 in tuition alone. Living expenses will vary based on city. With shared accommodation, let me guess \$9000 per year. So adds up to \$50000. With a higher ranked school or in a bigger city, this could easily be \$75000. With funding, I only took Rs. 4 lakhs from India which was then \$8000. I got funded second semester, and my funding would cover my in-state fees (out of state fee is waived if you are funded) and leave a little bit over to live. I racked up credit card balance to \$10000 when I was done and paid

	it off in 3 months after I found a job. But let me warn you, funding does not come easy or cheap. Funding may require you to give up your interests, and sometimes it may not be worth it.
GA	Fees - \$40,000 - for 4 sems living - \$8000 per year flights - \$900 one way. Visa, GRE... Guess around \$500.
ARV	Depends on schools. Each school has different fee structure. Check school tuition costs. Also know you will have living and incidental costs.
LK	It varies widely with the country and course.

10. How long did you take to prepare for GRE? What are the best ways to prepare for GRE?

VK	My answers on GRE may not be helpful since I wrote it in 2006 and the format was way different back then. I did self-study with Barrons and GRE Big Book. While selecting schools I used this forum called edulix. Not sure if it is still around. If it is, it may have helpful leads to GRE preps.
DM	It is like any other exam. Approach it the same way as you do to other tests. Barrons used to have good material for the older format GRE
DP	I did not write GRE...I got admission through gate score
AK	2 months of hardcore self-study consisting of several books, mp3 word lists and practice exams. My target was to score a 100% in GRE (1600) and that's how I structured my preparation. I took full-length tests every week and focused the next week on areas that I sucked at. It's important to spend some time self-reflecting in the process. If something isn't working for you, see if you can adopt a different approach.
HJ	3 months maybe. Let's be honest, it's much simpler than MTech. My test was in the old format. And I could manage 1460 (quant: 800 and verbal: 660) in limited time. There are loads of course material available. More importantly, do a lot of mock tests. That is the point of focus
TM	It depends on how good we are with English words. If you have good vocabulary much preparation is not needed. Self-study is enough to crack GRE. There are tons of online material to assist in preparation. There is verbal section and quantitative section. Quantitative section is very simple mathematics.
AR	I did self-study. I scored 1430 in the 1600 age. Focus on verbal. Learn all the words. Not just for GRE, but the 5000 or 3000 words in the back make you sound smarter every day of your life. Try to put some time into critical thinking and reasoning as well.
GA	2 months. Self-study. Standard books. Example tests.
ARV	I applied in 2002. I focused studying with the official GRE books. I prepared for about 4 months and 2 hrs. A day on average and about 4-5 hrs. a day on weekends. Self-study should be more than enough. Take sample tests from all providers.
LK	I took 2 months to prepare and it was self-study ad-mist work. There are multiple sources online to study from. Barrons is a good book to refer to. A lot of practice tests definitely will help.

11. Any suggestion on websites that would be useful while seeking admission abroad?

VK	edulix.com (if it is still active)
DM	do not know
AK	edulix.com gradcafe.com Google!
HJ	Edulix msinus redbus to us
TM	Edulix.com is a very good site
AR	phds.org usnews
GA	No idea.
ARV	Don't remember anymore. Research the schools, reach out to profs, Indian student associations and departments to get a better sense of the school, the culture and the students. You will spend over 2 years away from your family, country and in a different country. You need to be sure you are there for the right reasons and are comfortable there.
LK	I preferred going to a consultancy agency to enquire about the procedure because people there can help you a lot in all the procedures. You will then have a general idea about the whole process. Also there are plenty of forums for discussion like edulix/forum

12. How important is an IEEE membership? How will an IEEE membership help?

VK	I was the IEEE General Secretary and all that. It was in my resume, SOP and so on. I don't know how much it helped to get admitted here -- it must have. But once in, I didn't quite sense any use of it. But again IEEE is an institute of engineers and I was more focused on research and hence scientists.
DP	I'm not sure
SP	Might be helpful. I never had one.
AK	Absolutely useless. Anyone can pay and be an IEEE member. Relevant projects in the area that you're applying for helps, but that doesn't really need an IEEE/ACM banner.
HJ	Really do not know. It wouldn't hurt I guess
AR	I think Volunteering for any organization helps. I hate to say this but I don't think a school cares whether you were an IEEE member during your undergrad. But showing that you volunteered and accomplished several tasks. For example, if you can say you organized this massive effort for gathering this feedback from alumni about graduate studies that would show several skills. Make sure to volunteer and give your time when in undergrad.
GA	Just being a member takes you nowhere. If you are active, you tend to meet people with similar interests. Read a lot. Study a lot. Meet good people. Network.
ARV	Not much.
LK	It dint help me as I dint have one. But if you have a significant role in that and if it can make it to your resume and reference with some good significance it is worthy.

13. How strong was your SOP? How should one prepare a strong SOP?

VK	Start with some online template and elaborate. It is a very important component and assign at least a month to work on it. My application packets were all delayed while I worked on the SOP. You could also have it reviewed by some professional essay reviewing service online (essayedge.com) --- it'll be expensive though. Not sure if there are Indian alternatives for that.
DM	I do not recall my SOP. SOP is a very important document and is a great tool for you to convince the university to select you for the program. Google around for good sample SOPs
DP	I did not prepare one. Singapore universities did not ask for it
AK	Around 900 Newtons. Just kidding :) Yes, you need a great SOP. A great SOP tells why the applicant wants to do the program and what his background is. The admission committee isn't looking for great writing (though it helps) or fancy words. They want to know if you will be successful in the program. Also, don't ask anyone to share their SOP. It's a personal thing. Formats and great SOPs can be found online easily.
HJ	More than junk content, show purpose in SOP. There are a lot of guides on how to write a good one. Make an initial draft, get it reviewed time and again till you have a good, clean one
AR	Yes. An SOP really really helps do two things. 1. Expose your writing skills including flow, vocabulary, grammar, usage etc. 2. Establish convincingly that you are serious about this.
GA	Invest time. Be honest.
ARV	The SOP is the only doc that personalizes your application and puts a face to the application. Here you need to show your motivations, what drives you, what keeps you up at night about computer science/Electronics, what makes you get out of bed about these topics, how Eng. has guided your decisions and how your goals intersect at the chosen school. Basically this document tells them how well you communicate and express your ideas to a complete non-technical person reading the SOP.
LK	I believe I had a strong SOP as the admission is again highly weighted on the SOP. In my opinion your SOP should reflect your sincere desire to be part of the institution. For this reason there is a need to know more about the university and the course you are intending to apply to and align your goals according to them. Online help can be taken but a personal SOP is the best form.

14. How did you make your application strong?

VK	I think being able to show some good research projects on your resume will be very helpful. A great SOP and reccos also will help.
DM	Get a good GRE score, write a compelling statement of purpose and have good grades.
DP	Work experience and gate score.
AK	Proofs that I have an interest in the area: relevant job, projects Others: Great GRE score?
HJ	Go the extra mile. Office work: implement something that supported or made better, your responsibilities. If not, do a course, show some project you undertook
AR	I didn't. But with hindsight, I would have included more actual work in my application relevant to the area I am applying to. Perhaps a Seminar report, or PCB layouts from your project, or something you did. Actual stuff you did always sells.
GA	Honesty.
ARV	Relevant work experience, strong recommendation letters, extracurricular activity, memberships to technical associations, global travel experience and project implementations.
LK	1. Strong SOP, LOR and CV 2. Achievements at college and work 3. Academic results should be highlighted (if they are strong)

15. Part-time jobs: Is it easy to obtain a job? Did you take one? Will it help?

VK	Yes. I took part time jobs first two sems to pay my rent. There's going to be so much competition. It depends on the univ. campus how easy it is to find part time jobs. Columbia had a pretty good scene in terms of part time jobs.
DM	You are technically not allowed to work outside of campus in US. It is illegal and if found could result in termination of your course
DP	I did not take one as I was not allowed to work part time because I was getting stipend from the university.
AK	Depends on the school, location etc. I had two. The extra money didn't hurt and the experience was helpful.
HJ	Well kind of. You get parking jobs, cafeteria jobs. I did not take one. It defeats the purpose of what you are here for. I converted my MS program to "by thesis" option and work in a lab now. (By thesis: by research. You have to research and publish to get MS degree. Preferable for PhD applicants)
TM	It is kind of easy to get one
AR	I worked part time on campus (which is legal) for the first semester. More than the money, the biggest help from this was the ability to obtain a social security card. Which meant that now I could apply for credit cards etc. If you are doing a non-research option, this would help. If you are doing funded research, I would advise against it. If you are doing research but not funded, it will be hard to juggle a job, but can be done if finances are an issue.
GA	Not very useful. Better to focus on academics and finish quickly. Unless its helps you learn something - even learning to talk to other people. If are you not learning anything new, it's pointless. Money can be made after you finish. Take a loan.
ARV	Depends on schools. In some schools it's easy and in some it is not. These jobs are life savers if you don't have assistantships and will help you get over your living expenses during your program.
LK	It is easy to get one within campus. But the amount of time you can dedicate to it will be limited. Yes I work as a student ambassador in the school.

16. Will it be easy to get bank loans for students?

VK	I wouldn't say easy -- but there are so many options I guess. I took from SBI.
DM	Should be easy
DP	I don't know.
AK	NO! This was the hardest part of the process. Get ready to 'social engineer' a lot. Be nice when you are asked to jump through hoops. Convincing your parents is another task that will be of varying difficulty depending on who you are :)
HJ	Yes it is. Till 5 Lacs, no collateral. But you would need much more for MS.
TM	We still needs to give some collateral to get loan from bank for abroad studies. Though the procedure is tedious it is easy it get one if we are willing to give collateral security like property docs/ LIC insurance/ fixed deposit to bank
AR	I think so, but rates in India are exorbitant. If you have a relative in US that you can get to co-sign for an educational loan, I think that works best. Repayment is deferred up to 2 years after you graduate.
GA	Depends
ARV	Yes. Most banks want your business and interest.
LK	It is easy but a long procedure so you need to dedicate good amount of time for it.

17. What opportunities available outside or inside India after MS/PhD? Why did you choose to stay in India/abroad after MS/PhD?

VK	I am yet to finish my PhD.
DP	Depends on the type of work. If you are into electronic hardware opportunities are better abroad than India.
SP	I am not sure I have a to-the-point answer to this question but I can help assess the situation for you to decide where you want to go or be: India has no dearth of educational institutions but when it comes to research, our country pumps in very less money and so does not look attractive. No money for procuring research equipment, no money to fund for conferences, no decent salaries for researchers, etc. It is a pity indeed. There is no point saying that India churns millions of software engineers every year, who eventually mostly end up doing outsourced work. It is a waste of talent and research minds. Any country needs a strong research backbone. India has some research activity in the space sector but otherwise it is not anywhere on the global research map. Perhaps time will unfold something positive.
AK	Plenty of jobs in the US if you're in my field. I stayed in the US because I don't think I can do this kind of work in India. Also, I want to go to burning man every other year :)
HJ	I worked in the IT industry. It was so mind numbing, that I had to get out. In US, core industry exists (catering to semiconductors, power electronics etc.) which you have far more chances getting in rather than India. Coming back to India is good too. But work here for a few years. The exposure is valued.
AR	I stayed in US as a matter of course. Staying in US has allowed me to complete an MBA from a top ten school and have my employer pay for it. It has also allowed me exposure to a different work culture (more fair / equal than hierarchical). There are also other quality of life reasons to stay. But this is a very personal area and I don't think I can advise anyone one way or the other. My only advice is, if you have family in India, visit often. It will be expensive, it will be hard to get vacation, a health hazard to travel, but make that trip. Or you will lose touch. My 2-3 weeks a year in India is my ticket to staying in touch.
GA	Unsure
ARV	Better career prospects, big roles
LK	I chose to study abroad because of the exposure and the facilities available here. And opportunities here is not plenty but not scare as well. It also depends on the country you are applying to and their current visa regulations.

18. Should I prefer MS or Direct PhD when applying through GRE?

VK	It depends on your background. Back when I was at CEC, my exposure to real research was NIL. A direct PhD admit to a reputed school would happen only if you have really good research background. You may still manage to get PhD admit from a not so great school. A better approach is to do MS, get your hands dirty by doing some research projects with some professors, and make sure you really do want to do PhD. Meanwhile, the experience would help you get PhD admits in better schools. Again, this is assuming that you do not have much research experience. You can email me if you want to discuss more on this.
DM	PhD gives access to funding from beginning, but will require more commitment and time. Also getting into a PhD program may be harder compared to MS
DP	Doing direct PhD can help you save a year or two. But going for masters can help you to make necessary basics for PhD. PhD is something u start without knowing when and where to end. It is better to have a master's in your PhD area of interest before starting PhD. So take a call based on your knowledge in your PhD research area. Also if you have work experience in the research area of your PhD then you can directly go for PhD.
SP	Depends on how confident you are with the field you want to pursue. If you still need to ace your fundamentals, go for an MS inclusive.
AK	This is a question you should ask yourself. Take a deep breath and ask yourself why you want to pursue higher education. Are you doing it for the fat paycheck? Or are you tired of being expendable

	in your current job? Or is it your passion to contribute to Science? Once you have clarity on that, you'll know exactly what to do. You'd be surprised at the number of people who end up doing non-MS/PhD related work after graduating. There are several other 'lite' engineering degrees that could work.
HJ	IMHO MS always, before a PhD. For one thing, you will know if you have research aptitude. For another, PhD needs a certain discipline to approach, along with a specialization (which can be obtained from MS studies) If you already have the above mentioned, maybe you could think of a PhD program. PS: general consensus, if you want industry: do not do PhD. If you want academia : do a PhD
AR	I don't think most people really know if they are fit for a PhD when starting MS. However, the indication of a commitment to PhD may help with convincing Professors to fund you. Unfortunately, too many have used this as a trick to get funding and quit after MS which has reduced credibility in stating this. But perhaps a year into MS, you will know, and then you can orient your program accordingly.
GA	If you are very sure that you want to do a PhD and you have some experience in the area - working with some professors at IITs over the summer or as a project manager guy for some professor in major schools, you will get some idea. Getting in to direct PhD is somewhat risky if you are not sure what your career and life goal is. MS is better in that case, you can finish, get a degree and move with whatever works out for you at that point. But if PhD is your ultimate goal, it makes sense to apply for direct. Also chance of funding is much higher for direct PhD admits. But, it's somewhat difficult to get an admission to direct PhD if you don't have any background. If you apply as MS and come and convert to PhD, it's a smooth transition. No big deal. Its mostly funding related.
ARV	Again there are programs that offer a direct PhD route, I would recommend going through the MS route. PhD is a very demanding and involved process. One's aptitude, motivations, perspectives and viewpoints change over time. It's better to finish a masters and then commit to a PhD program in that sense it gives you options.
LK	Depends on your choice of career. If you are certain about the research career then a combined PhD option is good and if you are not completely sure about the research then MSc because from there you can either get into research or industry.

19. Apart from all these, what all should we take care of while attempting GRE, filing applications, during course of study, or post-course?

SP	If you know why you want to do what you want to do (aka an MS or PhD), then you are 99% oriented. There are set procedures for preparing for any exam and also filling forms. This I believe we will all do well. What is demanding is the course of study. In CEC, I do not remember doing any tough course. From my experiences at Edinburgh, Basel/Zürich, a Master or a PhD is not a piece of cake. One needs arduous amounts of dedication, passion and the never-say-give up attitude in research as well as in studies. The assignments can look very taxing when they are first rolled out. Your basics simply need to be strong. So do all you can do get this sorted. Have a look at the course contents even before you embark on one and do some preparation in advance. It will pay off.
HJ	Letter of Recos Statement of Purpose Financial Documents there could be more, but nothing that can't be found from online searches, where they give you check points for your application process
AR	In picking your school, always always talk to people who went to the same department in the same school somewhat recently. Only they know what area the school is strong in. You cannot tell that from their websites. If possible, try to find someone who focused on the same or similar area as you are planning. If you can't find someone who did that, ask yourself why. Maybe the school isn't strong in that area. For example, you would have no trouble finding an embedded systems grad from Carnegie Mellon. Second point is, rankings matter. Consultants will try to undersell you. But when applying, try to

	<p>apply to a few schools that you think you simply won't get into. Yes, it costs extra money to apply to one more school. But listen to this, THIS IS A LIFE CHANGING DECISION. Apply to 10 or 12 schools if you have to. Sure, have 2 or 4 safe schools, but go for gold.</p> <p>Third, try to tweak your SOPs to each school you apply to. Explain how the school and specific research areas or courses at the school fit into your plan. Do your homework. The SOP shouldn't be all about you. Think of the SOP as a cover letter. You always start a cover letter talking about them, not about you. SOP is the same way.</p> <p>Feel free to email me at cloud9ine@gmail.com any time.</p>
GA	<p>MS is not a piece of cake. It's tough. I worked 16-18 hours a day when I was getting my MS to finish everything on time. Its hard work. It's not for lazy and unambitious people. Go for it only if you have the burning desire to learn more and to grow more. You have to be far from family - not good for many people. It's a new world.</p> <p>This being said, there are many "regular" people who just come here, get some degree, and find some job that pays \$90000 per year. I know many like that. It's not a bad thing. But, then, you must realize that your main aim is money, which is not a bad thing. But, you must make that decision early on.</p>
ARV	Read the above answers.
LK	<p>With applications just make sure you have ample time for it. Space out the exam in such a way that you do not miss any deadlines because most of the universities have an early deadline.</p> <p>And during the course of study, network. That is the best way to explore new opportunities.</p>

20. Which all Universities must we focus on applying?

VK	<p>University selection is a lengthy process and it very much depends on your likes. For example, if you are crazy about Robotics, you should not even consider applying to Columbia, there isn't really much going on in Robotics here. Specifically, you should research at least the top 30-40 schools on what fields they are good at etc. You should also get a sense of how easy it is to get in there -- check out university student directory to see where the Indian named students did Btech from :), check out the acceptance rate statistics if available. I used edulix.com back in 2007-08 for all this. There must be other resources now. For me, this process took almost 4-5 months. The usual approach is to select a few ambitious schools, 1/2 safe bet schools and the rest medium ones.</p>
DM	<p>You need to asses yourself first before picking up the universities. The better a university is the harder are the chances of securing an admission. Also from a funding standpoint you will have to compete with the best candidates out there to get some kind of assistant-ship. From a visa standpoint the university you pick needs to be a decent one so as to convince the visa officer to grant you a student visa. Also better universities offers you better job opportunities as well.</p>
DP	Up to your academic and gate/GRE scores
SP	
AK	<p>Wrong question. It really depends on what you want to do. This isn't anything like B.tech in India where everyone wants an ECE at CET. Know what you want to do. Figure out where the best people in the area are based out of. Do a LOT of research.</p>
HJ	<p>More than rankings, see what you can afford too. Pick one that balances quality with cost. Because, unless you are doing research, the huge ranking difference should not matter that much. (Unless it's an obscure one that is a law school and you got an admission there for engineering).</p> <p>Also, look at courses offered, lab facilities etc. etc. Fact is, Btech is a joke. You won't be able to make a very educated choice with that knowledge. Also, it's that age when you think u want something, but what you need would be something else.</p> <p>case in point : Do MS before PhD</p>
TM	Depends on what you are planning to study.

AR	Rankings are important, but more important is making sure the school you pick is very very strong in your area of interest. I made a big mistake here, but got through okay because I got to work on research with a Professor and play with and learn Embedded Systems although the school I picked was not strong in this area.
GA	Any large public school is good. Best thing to do is to check the coursework planned for next semester. If there are plenty of courses in your SPECIFIC area, it means that there are many professors and it's an active place for this topic. Also check faculty publications. If the professor is not publishing at least 6 papers a year, Don't go there for that specific area. Usually, the more number of professors IN the specific area, more funding, more students, more activities, better network, better jobs. Also, look if the department is hiring new professors in an area you are interested - shows that there is still progress and new people always bring in more funds and more opportunities. For example - if you are choosing microelectronics - make sure that your school has a clean room, funding in the area, lots of coursework related to this area. Mostly jobs are in the design area. So look for design course offerings - Chip design, RFIC design, analog design, high speed design, low power design... etc. Sometimes it's worth to take a somewhat big loan and pay it off as you graduate. Generally, funding should not be the main criterion - if it's feasible.
ARV	I would not focus too much on rankings. These rankings serve only the purpose of the magazine selling the rankings. To get a general sense see the rankings on US News. Research schools independently and reach out to the Indian Student Association to get a sense of the school, profs, living situations, program, university funding details and on-campus employment. Do not expect any school to provide you scholarship or any assistantship right away. I applied to schools in 3 categories - super competitive(UC Berkeley, Princeton), reach schools(univ of Texas, Penn State, Ohio state, University of Illinois at Urbana Champaign) and comfortable admissions schools(Arizona state, univ of Denver and Clemson state)
LK	The university ranking for the course you are interested in is the first method. But a more informative way is going through the university websites and understanding their area of research and course structure will give a good idea about the universities to focus on.

21. Is it more expensive applying to Singapore Universities than those in US?

VK	No idea.
DM	No idea.
AK	No idea.
HJ	I do think so. But then again, if work is what you want to do, US universities are better Then again, not making a generalization. Research on your area of interest.
TM	It depends. But generally US universities are more expensive
AR	No idea.
GA	No idea.
ARV	No idea. I applied only to US schools.
LK	No idea.

22. Will taking a year break affect our chances of applying for MS?

VK	It shouldn't affect. It can help if you can do some research projects during that break.
DM	No as far as I can tell.
DP	I'm not exactly sure about that. But I don't think it will effect as long as you have the passion to study.
SP	It does not really matter. I had a 6 year break.
AK	I'm assuming you mean doing nothing for a period of time before applying for an MS. I don't think it would matter at all. However, employers may be curious.
HJ	Well, not really. Make sure you do something worthwhile to boost your statement of purpose.

TM	No, in my opinion
AR	No.
GA	It's best to apply in 6th sem and rush off directly to do the MS. No point in wasting the year. Unless you are doing a job that is directly related to your area of interest. Don't fool around the 1 year. Work in a closely related area and that will make you a better candidate and boost your chances of getting a job after you finish MS. No harm in spending any number of years, as long as you remain on your SET path.
ARV	Not at all. Apply when you are ready.
LK	No. But depends on what you do in that year. An added work experience or internship always improves your chances.

23. Is it better to work in industry and then go for MS? Or directly going for MS after B. Tech is preferred?

VK	A 1-2 yr. work experience is usually considered a positive thing. But beyond that, it may be a lil too much. I worked for 4 yrs. after Btech before I returned to do MS. It was hard to switch back to a student life. It gets harder for you the longer the break is.
DM	Having work experience definitely will boost your chances of securing some kind of scholarship/assistant ship.
DP	Working in industry definitely change your mindset and attitude towards study. Also you will have a better chance after masters to get a job. So I would say working for couple of years in industry definitely helps.
SP	It depends. Each has its own pros and cons. In the end, it is your will power to endure research that matters.
AK	I made two attempts at doing the GRE. The first one was right after completing undergrad. I had a really hard time motivating myself and quickly gave up. 3 years of being a software engineer in India pumped me up with enough motivation to do all the crazy work required for a grad school application. Some of the stuff that I did at work were key in securing my dream internship in grad school. I would say working a few years will give you some skills that will be helpful in grad school.
HJ	Industry experience counts. The more relevant, the more the weightage. From my observations of colleagues who have had work-ex and those without, I would always say work for a year at least.
TM	It is better to have some 2 year experience before doing MS. It helps your studies and job search after your studies
AR	I went directly. I think the issue is there is a window of opportunity issue, and reluctance to abandon a steady paycheck that can get in the way. But if you can be sure you will have the will power, I would recommend getting some work experience under your belt. It is preferable but not necessary that the work experience be in your area of interest for MS/PhD.
GA	For PhD - direct is better. For MS - industry experience counts if you are working in a related area. And if you take on good projects and learn a lot. Makes no sense to simply hang out one year at any company. You must be actively learning new stuff and advancing yourself.
ARV	In my opinion, a work experience better prepares one for the global experience. Besides, having work experience gives you a head start if you choose to work after your program and the money comes handy.
LK	It's a personal choice. Personally for me working in the industry helped a lot as my course was very well aligned to the industry and it was course work.

24. Whom did you get the Recommendation letters from? How significant was their content?

VK	Very very significant. I took it from Smitha miss and Shyama miss and my manager at the firm I was working for.
DM	Recommendation letters are important and most universities take them on face value. If you are fresh out of college the best option is to get it from your professors. If you have worked in an industry, then your manger could write good things about you.
DP	I got recommendation letters from Liju Philip sir and deepa miss. I am not sure how significant was their content as neither I had access to it nor university told me how good/bad those letters are.
SP	Smitha Dharan Miss
AK	Professor Devassya and 2 of my managers at work. They were about a page each.
HJ	Philip Cherian, Deepa Jain. It's quite significant
TM	I got one from work and one from one of our college professors. The content is important enough.
AR	I got recommendation letters from three professors. I typed up the content. Again, I don't know whether the content was useful.
GA	Get letters only from people who have a PhD. Make sure that they write Dr. in front of their name. Letters play a big role. They are read.
ARV	I got my letters from the Principal, both HODs and 2-3 lecturers. Recommendation letters are crucial and add lot of value. Please know every component of your Application carry similar value so don't focus only on your GRE and ignore the other aspects of your application.
LK	My recommendation letters where from the following: <ol style="list-style-type: none"> 1. Project manager from work 2. Hod of Btech course 3. Project Supervisor The reference has very high weightage while considering the application. It is important to communicate clearly with the referees about yourself and your achievements before they are asked to write the reference.

25. How is the Campus Job Offering? Similar to campus placement methods at CEC?

VK	At Columbia, on the 2nd or 3rd week after we started, there were career fairs for summer internships! :) So yeah, campus placements happen around the year with pre-set schedules. It may be different for universities in small towns though.
DM	Most universities will have annual job fairs where companies put up stalls and invite students to apply at their companies
DP	Campus job offering is very less. You have to apply by yourselves in websites, job expos etc.
SP	
AK	Phenomenal where I went. Getting a job in the US is very different from getting a job in India.
HJ	There will be companies visiting with a handful of jobs. There will be a bus full of applicant for that too. More chances with independent applications and referrals from current employees.
TM	Not similar to the Indian system. Here we apply for jobs online directly to the recruiter. But career cells are active in universities.
AR	Universities have career fairs. However, most companies don't hire internationals since they will not do H1 visa processing which is required to continue working after you exhaust your optional practical training post-completion work permit. But here's my biggest piece of advice. Whether through campus or outside, focus on <ol style="list-style-type: none"> 1. Networking 2. Internships Even if you are not looking for a job, talk to people from companies, and develop relationships. Internships are very important if you are not doing a PhD. Does not matter if you do groundbreaking

	<p>research in your MS or get a 4.0. Get an internship. Internships open doors to full-time jobs in the future. This is ever more important if you start MS without any work experience.</p> <p>Second piece of advice is, in the job-heavy climate of India, making a resume and sending it is enough. Not here. You have to put a lot of work with the career center to fine tune your resume, cover letter for each job.</p>
<i>GA</i>	Depends. Many students find jobs by applying to company directly or through some network contacts.
<i>ARV</i>	Nope. Usually reserved for American citizens.
<i>LK</i>	In my place NO. Companies will have presentations and talks in college but they do not come for placement drives. You are required to go to their website and apply for the program.

We would like to thank all those that helped with this initiative.
