**Aman Agarwal and Gaurav Singh, Computer Science and Engineering’20**

**Gems of IET Ep. 7**

*I don’t know how many of you are aware of the fate of those two friends in ‘Honest Engineering Campus Placements’ by AIB who promised each other to be placed together and failed, but mind you, the two seniors in question here did get placed together in DE Shaw and none of it was planned!*

*Let’s dive into this very raw interview of Aman Agarwal and Gaurav Singh, the two seniors who have been leading from the front and have set a very good path for the juniors to follow in!*

*Good evening Sir, I would like to start by congratulating you both for what you have achieved and it’s truly inspirational, to say the least! So, let’s begin.*

**Q –** **As it is often said that to start something is the most difficult part of it, so around which semester you both were sure and truly aware that you wanted to code and get a job in this field and what were the initial barriers that you faced during that time?**

**Aman Sir –** If you talk about interest, I had it from the time when they teach you C or Java in 9th standard. In college also, I started coding from first semester itself owing to Fractal. However, coding, in view of getting a job came at a much later stage i.e., around 5-6th sem. My grasp on data structures and algorithms was pretty strong from the start so picking up pace was not an issue. The only barrier I think I faced was understanding a lot of new information about this field which I was not already aware of.

**Gaurav Sir –** Just as everyone else at IET, I started to code in first semester at Fractal. But that wasn’t when I decided that I wanted to do this. As a matter of fact, I just did like 50 odd SPOJ questions back then and left it for next two good years, basically thinking that the idea of competitive programming was very mundane and pointless. I loved solving problems but at that point, being a novice in the IT sector, I couldn't see how it fits in the bigger picture and so owing to my curiosity, I decided to explore fields both within and outside the CS domain, finally settling at ML which was ‘the thing’ back then and also a good intersection of everything I liked. After giving it ample amount of time, it dawned on me that it is going to be more like a dead-end If I don’t want to do masters.  
At this point I was lost for a while surely. I knew what I liked but it didn't pan out. I was disheartened. So, I went back to coding as an escape, not CP but purely DSA based problem solving. I loved being able to create something of my own from scratch, to solve problems using those tools, converting ideas and logic into mathematical structures and then translating it for the computers to understand, and that got me hooked again.

**Q –** **Do you think there should be a threshold, that before this point one should start doing stuff in order to enjoy a prosperous career ahead? What is that threshold according to you if any?**

**Aman Sir –** It is hard to define a threshold that'll work for everyone. I may have started just one year ago form career viewpoint but I was already somewhat prepared for it. But for someone who is not consistent and hasn’t yet started, it might be more. Or if you are dedicated enough, it might be even less. I think an overall safe threshold to seriously start thinking about career would be 5-6th semester.

**Gaurav Sir –** I agree with Aman that it cannot be the same for everyone. There is no right way to living a happy life or having a rewarding career. Different things work for different people.So, it is on you to figure out what works for you in your given circumstances and then give it your best shot**.** The world is full of talented unsuccessful people(success here denoting, what they could have been, if only)**.** Living with untapped potential is my biggest fear and is the fiercest source of motivation for me.This works for me, might not work for someone else.

**Q – In the initial days of our JEE preparation we attach high values to the motivation factor, though it becomes quite clear with every passing year that discipline is the real deal. What were your hacks to remain consistent every day? Were there any cheat days?**

**Aman Sir –** Discipline is very necessary. I think the lines: ‘Do it if you want something nice for your future. Do it if you don’t want something bad for your future’ should help everyone in finding their reason to be disciplined and staying motivated. I often reminded myself of my failures, kept healthy competition with friends and asked my close friends to notify me if I went off track.  
About cheat days, yes, I had them once a week which comprised of watching anime, movies, series, Netflix or just sleeping. Change is necessary and it will happen. Monotonous schedule does not do much good.

**Gaurav Sir –** For me it is about the environment that I am in. I find myself more immersed in work and motivated to start when I am surrounded by people who share the same vision or at least a common goal. That way, you can induce the other person to do what is needed when they are not feeling like it or just being lazy and vice versa, they help you. The cheat days should come once in a while and mostly when all of you are adamant about doing nothing. I am fortunate that my close friends are incredible people, who are not just talented but equally hard-working and curious. And they are the same people I like working with as well, so there is no line to separate fun and work and that is what keeps one going without burning out.

**Q –** **How important it is to be surrounded by like-minded people? And what are your thoughts on the present coding culture in our college?**

**Aman Sir –** Company of like-minded people is very important as it does remove a lot of obstacles like removing doubts about the chosen path. Also, learning becomes dynamic as everyone brings something new to the table. Most importantly, people around you back you up, believe in you and you believe in them. Someone is always there for you.

About the coding culture, it has never been better and I would give the whole credit to seniors and Fractal. It really has improved a lot over the last four years. More and more capable people are coming out and are changing the whole picture of college and its students, as seen by the outer world. Like, people have really started recognizing the college from the coding club and are intrigued and impressed by how we do things here.

**Gaurav Sir –** If you have good company of like-minded people, well and good, but it’s not like, you necessarily have to be best friends with the ‘coders’; just maintain casual comradeship with them. Just get comfortable with discussing things and learning from them, and returning the favor whenever possible.

The journey from ‘coding classes’ with 20 regulars to ‘Fractal’ with a batch of 80+ regulars, from being non-existent on coding platforms to dominating in every other contest, it has been an incredible transition to say the least. All thanks to our seniors, fellow batchmates, and juniors for making this happen! But trust me even after being so close to the change all this while, it feels incomprehensible sometimes. Also, it feels so good to see how every fresher batch is doing better than their predecessor batch. But what we like the most is that now there is an evident change in the discourse that goes around in college, people are discussing projects, ideas, logics, codes, placements, internships, packages, tech stack etc. This is a point, where we believe, this whole environment doesn't need anyone's push anymore, it doesn't need to be enforced now, but just regulated and I think everyone is doing a great job at that.

**Q –** **What tips would you like to convey to your juniors or rather what things would you like to do differently if you get to start again?**

**Aman Sir –** That’s a tough one because if I were to right all my wrongs, things might have panned out differently, and who is to tell if they were going to be better or worse. But one thing that I would like to add is, keep pushing forward and don’t lose sight of what you want. Cheat days and relaxation is needed but don’t waste away complete years. Try and don’t be afraid to lose. I am always chill about things and so I would suggest just go with the flow!

**Gaurav Sir –** Honestly, I wouldn’t change a thing. Whatever worked out well, and what didn't, it still got me to some place after which I know better - what I want, what I need to do to get that and what I should not do.It’s all about experiences, good or bad - we have to cherish them, ‘varna gile shikve hone lagte hain’. I would say be honest with yourself, do what you want to do, be you and not what you think others think you should be. Try to find who you want to be, and be that. If you don't know yet, keep looking.

**Q –** **How to balance development, coding, internships and projects (what is the best time to begin each and duration of each)? Also, can you provide a brief description of how you got your first internship?**

**Aman Sir –** Not the best person to answer this but:

Sem 1-3: Just code  
Sem 4-5: Projects + internships + coding  
Sem 6-8: Development + coding + internships

This is flexible and may depend and be different for every person.

My first internship was just to write some articles and develop DSA for an open source community. I came to know about it through a friend of mine. I applied to it and completed an assignment that they gave and was selected for it. It lasted for 2 months.

**Gaurav Sir –** I am going to mention the most idealistic way of doing things that I know most of us won’t fit into, but here it is:

Sem 1: Code in C++/Java preferably (or python but at your own risk) and implement basic DSA.

Sem 2: Cover advanced topics of your preferred language i.e. STL, collections, OOPs and advanced DSA

Sem 3: Practice coding and participate in as many contests as you can and up-solve afterwards and in development- basics of git and web-dev or something of that sort.

Sem 4: Continue doing the same things for coding as in semester 3 and start development properly (preferably by participating in hackathons) and look for internships if you want to add weight to your resume (it will help a lot at later stages).

Sem 5: Keep coding. Increase development. Actively start applying for internships.

Sem 6: Same as above. In coding, shift focus to Interview questions using LeetCode or InterviewBit or HackerRank.

Sem 7: Same as above. Start applying for jobs. For tests and interviews prepare through interview experiences (company specific).

Sem 8: Hopefully you’ll be placed by now. Party hard and don’t forget to invite us. Otherwise keep hustling. Luck is a huge factor so don't beat yourself up. Remember you only get it right once!

My first and only internship was at NEC, which I got through college. It was not very good actually, I left it a week before my release date. But it gave me good exposure and added value to my resume for sure. I did web-dev for the first time ever in my life there, actually, any sort of development to say (I don't count applying ML algorithms and web scraping as dev work). I declined another internship offer for this which was based on Deep Learning, as I wasn’t much interested in it.

**Q –** **What are the things one needs to keep in mind while looking to be placed off-campus, and what are your thoughts on the current on-campus placements? Are there any on-going myths you want to break over how to prepare for placements?**

**Aman Sir –** Well, currently for off campus, one needs to match or even outperform the students from other reputed colleges to have a chance. I admit that the college name has an impact but performance always outshines that factor. On-campus placements lack because they think that students here are mediocre. We don’t even have proper policies regarding on-site internships and also people wanting to bring change are not always welcome. So, under pressure most students end up getting demotivated. It’s quite evident that students here have to put extra efforts.   
The myth that I want to break is that cracking good opportunities in this field are not as difficult as some people think it to be and it’s no big deal. Anyone can do it.

**Gaurav Sir –** Networking is crucial for off-campus. Try to be proactive regarding opportunities and grow your circle accordingly. Also, work on your communication skills to a point where you can at least express yourself clearly to others. After that, your knowledge, work, profile, and your attitude will take in the reigns. Communication becomes particularly important because you are already competing with a pool of candidates with almost the same caliber and background. So, if you are not able to convey your thoughts then the interviewer should, in all fairness, pick someone else over you who can. But this also doesn't mean you need to be a Shashi Tharoor. Other things are pretty standard, know your core subjects and tech-stack in and out, practice coding as much as you can, and before interviews gather info on what to expect, by reading past experiences of that company. On-campus placements have a long way to go, hopefully they change for the better.

Myth that I would like to break is that, it is not something extraordinary to have done this. It is just like any other thing; you keep doing it and with some luck one day you get through. For some, it takes 3 months, some maybe 6, some a year or maybe more, but it can be done by anyone. Also, it is never too late. The second you decide you want something, start building brick by brick and you will get there eventually. Just decide, start, and don't give up.

**Q –** **Given that there are a lot of good coding platforms right now, what is the right purpose and time to pursue each? Also, how useful/important are social sites like LinkedIn to get exposure/opportunities? And did you keep regular notes of stuff?**

**Aman Sir –** In the starting phase, when one is new to coding around 1st semester, I would suggest platforms like SPOJ and HackerRank. These help in getting a hang of coding platforms and standards. Thereafter, for serious competitive coding and speed building, a shift to platforms like Codeforces and Topcoder is a must but before that one needs strong concepts of DSA so platforms like CodeChef and HackerEarth come in handy. Finally, for placement purposes platforms like InterviewBit, LeetCode, GeeksforGeeks and HackerEarth are the best.

Having right connections and wide network is a huge advantage in today's world of cut-throat competition and so presence on platforms like LinkedIn is highly recommended and has a huge impact on career.

I am starting to sound like a self-obsessed, narcissist person now, but I didn't really keep notes for DSA for the reasons I have already stated but yes, I do make notes sometimes when the info is easy to forget or if I want to keep it for future reference.

**Gaurav Sir –** As I said, I didn't do much competitive programming, so I might not be the best person to answer this. But many of my friends did this – SPOJ to get used to it, CodeChef and Codeforces for contests and LeetCode for interviews.

As per the current environment, LinkedIn is very instrumental in career growth. I would say connect with like-minded people and have conversations with them on some common interests and inculcate a relationship rather than just directly asking for referrals. Also, reach out to recruiters of firms you would like to work with.

I don't keep proper notes, but yeah, I like to keep my resources organized and keep track of all the relevant webpages that I found helpful in the form of bookmark folders or using some note-keeping app.

**Q** – **Were you into any extracurricular activities alongside coding and do you have a role model / senior that guided you and is that necessary?**

**Aman Sir –** I don’t have any record of any extracurricular whatsoever. I wasn’t into them. Although I like to watch anime, read manga, play games, and sports like volleyball, badminton, cricket, TT, foosball etc.

Nishant sir and Shivang sir were the ones who brought coding culture to our college. Seniors like Rohit sir, Ashwani sir, Tushar sir, Shashank sir and Achint sir guided me all the way from 3rd year. These seniors were like role models to me but it isn’t necessary to have a role model, you can be the first you and be an inspiration for others.

**Gaurav Sir –** Well, there are a lot of things; mostly related to media consumption of all types - movies, series, music, vlogs, podcasts, anime, comics, books (trying to do more of it). I play cricket every chance I get. I play badminton, TT as well.

I have a lot of seniors to thank for actually. Whatever I was able to do was because at one point in time they believed in me when I wasn't able to and they helped me a lot. First would be Rohit Sir and Ashwani Sir, they were always there to tell me "arey sab thik hai, chill kar". Tushar sir helped me a lot in the first semester when I was a complete newbie. Shashank sir and Achint sir are the most chill and fun to be with, they really put a lot of time and energy into us. And last but not the least in any way would be Shivang sir and Nishant sir. Honestly, they are the reason why we were even thinking about setting these goals for us because at one point it felt like near impossible given our background. Having a senior on call is a good thing to have, not necessary obviously, but good! As far as role model goes, I am not comfortable with that term, so no.

**Q –** **Finally, how does it feel for you to see all the hard work bearing fruit? How was that moment when you got to know that you have been placed and that too in DE Shaw? (Did any of you ever think you both will be placed together in the same company? That must have been such a happy surprise!)**

**And also, are you looking for more? As in what next?**

**Aman Sir –** There are no words to describe that feeling, the smile I had and the happiness of my parents, it felt like I reached the unreachable. It was unbelievable and exciting at the same time when I got a call from DE Shaw. It’s a really good company to work in. I never even imagined that we'd be placed in the same company but I was hoping for it when both our interviews were finally over. That indeed was a surprise. Fun fact: We were offered the job on a conference call so the feelings increased exponentially.

Yes, there is always forward to move and higher to go and so I am currently looking for more. I would say this is a checkpoint, so will explore a little bit and get better for now and then will look for another new adventure.

**Gaurav Sir –** It was initially very confusing for me. It's a long story involving some miscommunication inside the firm. But when the confusion subsided, it was just an overload of so many emotions. Overall, I was happy, of course, but more than that, I was relieved, to be honest, like getting that external validation for your work. Also, be it coincidence or destiny, but I always wanted to work in a fin-tech company for like ever, and in the end, I got hired in one, and that too D. E. Shaw. I seriously used to read David Shaw's interviews back in 2nd year. So, it is indescribable how I felt. But, more than anything else, I have gratitude towards so many people who were involved in this whole process spanning 22 years. Getting in with Aman is just cherry on top. I don't think I could have asked for better cards. But honestly, I wish he gets out of here as soon as he can (wink - Google), as he deserves it.

For me, the last few weeks have been amazing. I am currently part of a great team, where everyone is so good at what they do and are always ready to help. I am learning a lot since I joined, and I find the work to be very interesting. So, for now, I am looking to settle in and absorb from this environment. Hopefully, if I will be half as good as they are, then it would be worth it all.

**Q –** **Although both of you are placed in the same company and will likely make a lot more memories together, what according to you is the most fun college memory involving each other?**

**Aman Sir –** I remember, when we were in 4th semester, we had registered for Google’s Code Jam and it was scheduled for around 6 or 7 AM. I being punctual and narcissist as always reached hostel on time (since I was a day scholar) and when I reached his room, the door wasn’t locked and the alarm was ringing and so I just let myself in and casually sat on the bed. When he came to his senses he was so stunned and was just like: where did you come from? XD. One funny thing about him that I always tease him about is that he has a habit of elaborating and saying a lot while I am just the opposite; being a man of few words and giving crisp answers. Although I am very talkative and may gossip a lot if a topic is to my liking.

**Gaurav Sir –** I agree. Brevity is not my forte. And he never misses taking a shot at it, like just now. And there are literally hundreds of funny stories about him that come into my mind. But I will go with a very simple one which describes pretty well, how straight forward he is: So, I called him at 11 AM one day with something important, he picks up, I asked with urgency in my tone "ek kaam tha". He said "Kya bata?". His voice sounded a little drowsy, so I asked "So raha tha kya?". He said "Haan so raha tha". So, I said, with a little gasp of disappointment, "Thik h phir so ja". He said "Thik h". Cut. I was laughing in shock, like when someone says something like that, one is supposed to say: "Nhi bata 11 bja h uthna hi tha kya kaam h bata?". But no! He cut the call instead. That is classic Aman. XD

*Thanks a lot for putting in the time and efforts in this, seniors. I am sure this will help everyone including me, a great deal!*

***Aman Sir –*** *Equally delighted! I hope it helps people who are looking to work in this field.*

***Gaurav Sir –*** *Likewise! Thanks for having us. Looking forward to read the finished result. All the best.*

***Aman Sir –*** *Same from my side too! Gaurav, I think you should give interviews on my behalf too, my answers are nothing like yours!* XD*.*