

Course Name- Complete guide for campus interviews: Step by step preparation for Internships and Full-time jobs

Professor Name- Prof. Vinod Aravindakshan, Prof.Vibin Aravindakshan

Department name-Humanities and Social sciences

Institute name- IIT Palakkad

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Choosing Companies

Hello folks, so we will get a little bit more into choosing your companies, choosing a sector and then deep dive a little bit more, look through the pros and cons as we go along. So, today's content will be along structured along looking at pros and cons of different jobs. We will specifically look at some of the advantages or the reason why you would need to maybe be more interested in core jobs. And finally, we will look at what it means to have a startup work and what does a startup life look like. So, we will get a little deeper into all these three topics. So, going to be a pretty interesting session today.

again looking at different sectors I would like to break down and look at the pros and cons. Let us give a little bit of background of why you would want to do that. I think there is a there is a maybe a fascination purely based upon large or a high compensation to enter into say for example, software rules. And like there was a section there was a lecture on one of the sections we discussed about how there is.

more jobs available in computer science field compared to any other sector. So, naturally it feels to most people like hey if I want to get a job in India you would need to be in computer science. Strictly it is not true, but we will look at what that choice means as people make a decision to make a career in computer science. Most rankings in terms of sectors people would choose for computer science, it has been the trend for a decade. Computer science and electrical engineering pretty much rank the top sectors where people want to get into for of course studying engineering.

But let us look at some of the pros and cons of getting a job in that field. So, firstly let us look through the pros. Computer science by nature of the kind of work that you do it is highly into tech, it is involved into the where most of the growth in the world currently is. So, consequently the compensation you can expect as a software engineer is pretty high. Not all roles within computer science pay the same, but if you look on the average across all sectors or across different job categories and then compared to any other field, you would see that computer science pays among the highest.

So, that definitely is one of the reasons it is a big pull, that is one of the reasons why people come to this field. Competitions also happens to have more jobs compared to any other field over there. The reason is that tech is booming around the world. So, since there is a big propensity for India to be a supplier as discussed earlier, US has a big shortage of people working with the STEM industry and Indians have a natural incline to actually go ahead study deeper and get a fundamental knowledge of technology. These kind of role becomes very promising and open for them.

So, the jobs across the world are now open for Indians and you would seen that since maybe past two decades lot of Indians migrate around the world to do work with technology. So, both these things are connected there is lot of jobs compared to every other sector in computer

science and there are also opportunities around the world because of lack of quality high valued engineers working with the STEM field who can also communicate and express themselves in the English language. Again, US which happens to be a large economy, it is a place where potentially most of the technology gets created this day, maybe second being China, but predominantly today most of the jobs are being created in US and it pretty much drives where the industry heads in most of the industry. Consequently, the shortage in US of talent makes it a promising place for Indians to actually migrate to or even work in US right and that is one of the reasons why there is lot of job again openings in computer science field. Working in computer science allows you to actually be pliant flexible, it helps you move industries especially or I would say job sectors at least in very parallel fields.

For example, lot of people from computer science move to being product managers or data scientist. Data scientist is of course, something of late, but there is generally a movement that is easy for software engineers. to being someone of a product or a data scientist. Now, most of you would have heard like big industries, I mean big CEOs to actually have had a background in product. The classic example is of course, Sundar Pichai right, he had a origin in product and consequently grew to head being a CEO.

So, and there is a lot of news nowadays about being a product manager which enables you to head technology companies. Consequently, there is lot of interest in product and one of the easiest way to get into product management is through background in software engineering. Traditionally, tech companies needed to have a background in selling to be able to lead the company. That has changed and today the focus is not about selling but being aware of what the customers need rather than pushing products to customers and consequently feel like product management has become really interesting and also a necessary background to actually reach the top of the company. Let us look through some of the cons.

One of the I think drawbacks I would say is coding or actually any sort of programming is a significant effort. So, if you are a programmer you have to spend a block of your time, it is not like other fields where you can do a little bit of work, move away, come back. Being a programmer necessarily means you have to sit in front of a laptop in not a very comfortable position and spend like 4 to 8 hours of a time at a block to solving certain problems. That is pretty strenuous. It takes a hit on a lot of your things like your health.

And if you are not passionate, it can quickly rob you of all joys of life. So that's, I would take that as one of the key cons in terms of like how much effort and how much concentrated effort in a single place you'll have to put to actually be successful in the job. Most students are aware of coding as maybe amateur coders, where they do coding on their desktop. Working with the production code is a totally different beast. If you have worked with open source, you would know it.

Most of the job is about fixing bugs, working on features that you might not really be interested in, but it is necessary for business success. So, there are certain skills required one on a technical front and also on a personal and interactional level to be able to be successful in developing code for production. So, that is something that takes lot of time and lot of energy to develop and sometimes these skills are not something that people are comfortable with developing and it is a quick fall off for many students who try to enter into computer science. Working hours like I said within software industry is flexible, but brutal occasionally and what that means is at the time of a release. So, for example, at the time that we were in Amazon

when I was heading product at Amazon, one of the things that we had to do was ensure that we had a date blocked off for a certain release.

And then ensure that at no cost would that release not happen, so that necessarily meant Tremendous effort towards the end of the project because there are so many unknowns that have to go into a project to actually make it happen and most of the things are not known at the beginning of the project. And that means like working 20 plus hours for days maybe week at a time to actually ensure that a product actually is available and ready for the market. This is a common practice across all industry I mean all companies out there in software industry space. The time of release is pretty hectic and it is a pretty grueling to actually be working over there. Consequently, of course, there are other times which are like pretty lax, which is pretty nice, you have a lot more time to spend, but you would be seeing that there are like swings of effort that you would need to put, which would not be a cup of tea for everyone.

There are people who would like to put a steady effort every time, constantly for a certain effort. Unfortunately, computer science is not of that nature. It means that whenever there is customer escalations, you have to be there 24 hours. Hopefully, not 7, but pretty for 7 if need be and if there are releases you need to spend significant effort to actually get product out. I have had both friends in the industry who had had a physical breakdown of their body after working decades in that space.

So, they have been like tremendous coders, they are like extremely productive, you can, the term that I think is often tossed about is a 10x programmer, someone who is kept productivity is 10 times more than the average, right, that is a common term that is used. So, I have seen these engineers who have been really productive out there, they are passionate about their job, but unfortunately their body has not been able to keep up with their passion and the long of hours, the kind of like swings that they have taken for the time have had a very detrimental effect. So, there are people that I am aware of who have big lifestyle diseases that is incurable that all of us and few of them have had mental breakdowns. We will not get into that, but the point being that this kind of lifestyle is pretty brutal and pretty hard. I have had engineers who are fresh into their role.

who had difficulty adjusting to the lifestyle and ended up with lifestyle diseases like diabetes, like chronic blood pressure issues, right. So, definitely being inactive, not been able to move around which is I would say the bane software engineers role leads to lot of health issues that accumulate. Companies of course, try to maybe provide things like work from home and other facilities, but that is always not something that works in advantage of employees. So, computer science is not all that rosy, there are cons, it is not for everyone. There are people who it works, if you can manage your life to be something that you can also get active life.

by working in a certain set of companies that have a good work-life balance that will be great, but that is not something that is possible for most of them. In fact, that is reason why many people actually shift out from software engineering after a period of time or decide not to grow further, but stick to the kind of roles that they are very comfortable with, which is a common thing theme that you would see across with software engineers. Let us switch into something that is related to technology, related to computer science, but maybe something that is a very like let us say hot these days. It is a field of being a data scientist or a data analyst. The data scientist part is of course, a little bit more advanced, you would need to do lot more of learning and delivery, but from a data perspective, data analyst and data scientist can be clubbed together into a certain set of roles.

The pros if you think over it are very similar to software rules that is they have a good compensation. It may not be so high as software related rules, but and really depends on the kind of data scientist versus a data analyst, but you would have a significantly more compensation compared to say other fields. So, similar to software industry there is a shortage of people who are worked in the STEM industry and by STEM I mean people have worked in science and technology space across the world. Indians are pretty good in it, they are pretty good with data, pretty good with analysis and consequently there is a huge demand for people or Indians or Indian students who have who have skills in data science or data analysis and there is a shortage worldwide including the US. So, all these are good if you are looking for a career that allows you to like get good pay has interesting problem technology problems allow you to be mobile that is definitely data analytics or data scientist it is definitely one of the spaces that you need to look at.

There is also a lot more compared to I think more other sectors there is also significantly more jobs being created in that space today as we talk about it now. There are cons. One of the big thin things being that there is no really an entry barrier to data analytics. If you talk about software for example, you need to spend significant amount like I said you need to see be in front of a laptop, spend significant amount of coding time, also work on large systems like open source systems to actually understand how you would work with groups of people in the production code. So, there is a significant learning gap.

And the gap between say really cool engineer in software space and someone who is average is significant more in software compared to say in data analytics. The reason is that the learning curve is a little more easy that there are tools and technologies that are related more to things that people are comfortable with as a as part of the analysis or kind of learning that they had in school that they are able to extract lot more value from it. And many of the times I seen that analysis comes good results come from simple systems rather than building very complicated systems. So, because the entry barrier is low anybody can get it have friends who are in their 40s who are transitioned from non technology space from marketing and other space into data analytics space and they are doing pretty well as data scientist right.

So, that happens. Really the barrier is not low and consequently the barrier being low lot of people can enter the market and therefore, consequently while today the market is doing pretty well, I would expect that in future you would have a drop in salaries associated with the rise in availability of talent in the market. To really be good in data analytics you need to have something called a business insight or a core domain experience. So, when I was working for example in Samsung where we were doing things like predictive analytics trying to find out when an equipment would fail before it actually failed by looking at data that the equipment threw up. So, one of the key things I realized when I was running the project was that the data by itself makes no sense unless you can actually connect it to some physical phenomena associated with the devices you are studying. So, that is just an example, but the point being that engineering domain experience, or a business understanding is critical for you to be able to extract meaningful insights in data analytics.

And that is not something that can be had by just like walking into a space. To be really a good domain expert, you need to spend significant amount of time working in that space, understanding it really well to be able to drive some insights from it. So, to be a data analyst in say one of those niche places or places within say manufacturing, within say with pharma or any other places, you need to have lot of domain expertise to be successful. You cannot just

throw a model and hope that there would be some results that come out of it. As the saying goes, garbage in, garbage out.

So, data analytics is one of those fields that is being like really challenged by advent of the AI technologies. So, there is lot of times these businesses ask these questions why do I need to hire where I can throw this problem at some of these large language models and ask it to analyze and come out with some sort of like understanding right. So, that is really a big challenge these days because there is these AI systems can also learn and be the same kind of a data analyst that an average data analyst can do. So, if you are I would expect that going forward you would need to have lot more domain expertise, lot more of specialized expertise if you are going to be relevant or stay active in the field. Finally, just like software, but not so much, but there is a inactive lifestyle just staying in front of a laptop, not really moving, staying in AC rooms, not exposed to world, which throws its own health problems much later in your life.

You would not know it in your 20s, you will not know it in your 30s, definitely 40s and 50s it start to play havoc. A common role that has many of the people jump in its finance. Finance is something that is seen both from engineering side, a limited set of engineers move into finance, but a large group who do business related degrees actually move to finance. And really the pros are related to the fact that it needs very specific domain expertise. If there is one field that needs a complete understanding of the business and domain, it is finance. You cannot just walk into finance without understanding the models, without understanding like managing of different cash flows.

For example, understanding different needs of a business, managing inventories like I entire business knowledge needs to be something that you are very comfortable with and have a very deep knowledge of to actually be successful in finance industry. This is one of the reasons why people go for certifications. There is a couple of certifications for finance that people get into and it is one of the requirements in fact today to actually get into one of these finance roles. If you talk a little bit deeper, if you get into things like trading and stuff, of course, there is a lot more expertise required, you need to be aware of financial models, you need to have a sense of how the market is and make predictions or bets on it. And that comes with even more since it comes with even more specialized market knowledge, and it is something that you can evaluate on a day to day basis by seeing how much profit you turn over for the company, that of course, pays a lot more well.

So, all finance jobs pay well, more specialists they are. more value you can get or more compensation you can get. finance jobs are not for the weak hearted, they have lot. So, we are getting into some of the cons, but they are not for the weak hearted, they really mean lot of effort, you need to be comfortable looking at like huge dumps of data, looking at companies charts making, looking at their balances, looking at expenses, you need to be comfortable with the tallying, you need to be have a very good understanding also of accounting to actually make a good impact in finance careers. And if you are a trader and or anyone else you need to be very conversant in say models and building up your own models.

So, long hours are expected, lot of learning is expected, continuous relearning is expected and you can consequently expect no work-life balance. So, you would expect that you spend most of your time in industry trying to like offer value. Hopefully, getting a certain position within the company that allows you to manage people later in your career rather than burnout completely. So, it is a role that can get you burnt out, but you can also get into a managerial role within finance where you can manage and devolve work and that should be fine for taking care

of burnout. But it is a field that has its cons, it has its values and it is something that is going to be around at least as I see it irrespective of any technology changes or disruption that happened till date.

Consulting is something that many engineers get into, definitely those people with the business background get into. Consulting seems promising because when I remember at, this is back like a decade ago, most engineers would want to get into consulting because that supposed to be where the intelligent people, the most intelligent people get into. Of course, it is also where most of the compensation is pretty high compared to our traditional engineering roles. Today, it is been kind of different we see that kind of rush towards STEM roles mainly related to software roles, but there was a time where consulting was a topic for most students. So, pros for any consulting is that you get to like travel a lot, you get to like work across.

So, this engagements are small, you work for small periods of time with a certain business problem and that is pretty intellectually challenging. So, you can work on a company, a sector across different regions. So, there is a lot of movement opportunity worldwide across sectors, across companies. You might of course, pick up a certain branch like say supply chain or maybe finance or revenue management or risk management something of that nature, but within that field there is definitely a lot of flexibility. Of course, since lot of technology companies, lot of businesses, big businesses exist in US and also in European Union, there is lot of opportunities to travel out, offer these solutions to these companies, right.

So, many of the big consultancy and in fact, any of the most of the consultancies have a way in which they allow people to travel out, work with clients that are not located just purely in India, but around the world. But even if it is in India, you will get a chance to travel across cities. Most consulting roles also allow you to like shine and get admissions to the MBA program. That is also the reasons why people get into a consulting role because of the exposure, because of the business background, it makes them a natural fit towards the MBA program. The cons are that the travel might seem the great initially to begin with, but as you spend days, weeks, months, years traveling non-stop, it becomes really a pain.

I know engineers or rather consultants, engineers who became consultants who were actually traveling like every week they would travel to a new look I mean a location far away from home, spend the entire Monday to Friday over there fly back. and then repeat this process ad infinitum right. So, and it is involved staying in some random hotels, it involves staying in some closed environments, it leads to its own consequent impact onto your dietary habits, it involves into your lifestyle. So, it has a big impact. Work life balance forget it at least in the beginning part till you become maybe a partner right.

It involves you to actually spend like 16, 17 hours a day, 4 days a week when you get and then the last 2 days making slides maybe for the next week preparing for it, but the life is pretty brutal. It is expected because kind of salaries is pegged way more than the average salary. ok. Most of these consulting companies are pretty hierarchical and they have a high attrition rate, it is because they would they encourage competition between consultants and they would like to only promote and keep only a limited set of population. So, there is there is one company I am not going to name, but there are many of these companies that have policies like not more than 20 percent actually stay, rest of the 80 percent So, it is interesting, it is exciting, it may be is even something that as young individuals people can do, but it has its consequences.

So, I kept the I think the crux of where I wanted to head towards other than discussing the pros and cons was that I wanted to talk about core engineering and why something that most engineers need to focus upon. So, of late I have seen that there are a lot of engineers who are in core whether it is civil metallurgy by the way I began my career as a metallurgist and moved in across sectors to a tech sector and then consequently being someone in the competition space. But there are a lot of people like me, a lot of people who have left their core calling whether it be whichever code engineering is and move towards software right. I think it is a while that while there is there are gains, there are there are some gains from core engineering that I think are worth calling out and I would want to talk about few of them. Among all engineering roles that I know of, core engineering, whether it be mechanical engineering, chemical engineering, production engineering, metallurgist, right? There is one place where engineers get to work on all three skills and by three skills I mean technical, business and people skill.

One place where their entire bunch comes together is in core engineering. Traditionally, if you look at it, every engineer is trained by their university to be technical, right? You work on a certain problem you, for example, if it is thermal sciences, you dig deep into it. As a metallurgist, you may know the iron-carbon phase diagram really well. That is your technology.

That is what you would know really well. You understand all the processes of it. But the work requires two other talent from engineers. And that is something that you find that is rapidly developed when you work in core engineering jobs. One of them is business skills. And the business skill, it means that understanding what the business requires and consequently making products for the business.

For example, you will be aware of what are the business changes that happens. You would have to interact with people in say reliability, you will have to understand what that customer feedback is like and consequently make changes to your business. So, if you are a product as an engineer you are making let us say an engine. engine does not live in a vacuum, it hits the market and there is feedback from marketing, there is feedback from sales, there is feedback from reliability and all these have to be taken care by you to actually redesign or improve upon the work that you do. So, that is something that you are aware of, you also you are aware of what are the different trends that is happening in the industry across your sector and across the world.

It is natural for you in core engineering if you have to be successful in the role. And, that discussion is always promoted at work and you will find lot of opportunities to actually engage with multiple layers to get deep into business. Secondly, all engineering work, specifically core engineering work at a very deep level is about people and trying to get work from people, right. So, when you are in any sort of a mechanical engineering role or any core engineering role, you would have a group of people who would actually work with you. They are called technicians, they may be called other engineers, they may be called assistants, name what it may be.

but you would have to devolve work and know how to actually get production quality work done from these people. So, it is not something that for a core engineer happens only when they become a manager. It is for an engineer, it is a bread and butter for right from the day one. So, for example, when I began my life in a semiconductor industry working as a process and equipment engineer, I had 12 technicians report to me right at the day one. So, I was answerable to ensure that they got the work allocated, that the different productivity targets were met, that we met the quality, we were able to control for the work that was expected and have it all organized right, such that there was no bottlenecks available in the whole process.

So, irrespective of the field, whether it is a production engineer, manufacturing engineer, chemical engineer, you would be someone who knows how to get work, how to talk with different people of different mindsets and working with people you would find is the most difficult thing that you will ever achieve in your life, which is people come with very different interests, people come with very different motivations and you will have to have an alignment to get work done. So, I think technical skills where it is always focused, technical skills is something that you would develop a lot. both at your education as well as in the industry. I think these two skills business and people skills are something that is a valuable experience that is specifically developed and cultured. When you are in core engineering compared to say a software engineering role, which is a more of an individual capacity role or a data analyst role, which is an individual capacity role, a finance role, individual capacity role, a consultant again individual capacity role.

Why is this, why is a skill, what did you make of it right? So, you have developed all these three skills, you know how to work with people, you understand businesses, you understand trends, naturally when you work in a production environment within engineering, what does it mean for you? Let us talk about pros and cons. So, once you have this all sort of background, you would want to actually go ahead and do something with it. So, for example MBA program, a common like I say input for MBA programs is consulting and secondly actually people with a core engineering, a production engineering background. The reason is because people who have worked in manufacturing sector are aware of the different skills required, they are able to get work done from people and they are able to utilize that irrespective of the business problem. MBAs love people with a technical work experience in core sectors because they have the skills that are also being developed.

taught at MBA school. So, the amount of upgrade that they need to do to these engineers is very less, they are almost job ready right at the day one. They just need to be taught a few more concepts and they would start to like fructify all those knowledge and become very valuable candidates for any sort of business role that is out there. right not everybody is I think suitable for when you say a software life it means specific being someone who is who can do the work on their own sit in a in a corner sit in front of a laptop spend bulk of time just focused on something on staring at a screen that is probably not everyone's cup of tea in fact it is probably not natural the way humans are we are as humans we are someone who like to move we would like to interact we would like to engage I would say a core engineering role plays to your strength of being naturally someone who works with people and able to actually go engage with people and get cooperative collaborative work done. So, not everybody is get fit to be a great coder, but almost everyone if allowed to flourish is fit to be a great core engineer. I have seen that burnout happens in lot of fields like for example, in CS roles it does happen with people are like fed up with kind of the work that they do sitting in front of laptops working on features that probably are not of interest to them, but I have never had core engineers complain about the.

the motivation that they get from working on the job. The job is always interesting, it has something new to offer, there is always a new learning that you can always pick up every day. So, core engineering is definitely a place that is good for you as a place to develop, compared to jobs like software roles or data science roles or even a consulting role, the amount of competition that goes into those roles are very limited or dramatically different for a core engineering role. For example, when I sat for my first engineering role at IIT. I was one of the can I think they were like 4 students sitting for a Tata Motors interview and I was one of them.

And so, it getting in was that easy. Like compared to like for example, I have a data point from recently from IIT Roorkee a product manager role, there were 800 people applying for one product management opening. So, that is a kind of competition that is available for most other roles. You would not find less than 50 to 100 people applying for a CS role, but you would find number of people applying for a core job to be really less. So, it is very easy to get through. If you do your preparation, you will have much less competition to get such roles.

Core engineering requires skills again it is something that has a technology background not to under rate it, you cannot be a good engineer without having the good fundamentals in. So, if you have spent time developing that as a skill that will have significant competitive advantage once you get to the work right. not everybody is aware of the background, if you have that you can apply that really well at your workplace and get lot more rewards from it. So, there is a competitive advantage that nobody else can come to and I would say in today's world where data is being brought into all sectors including manufacturing into pharma, I would say that it is easy for people who have been in core engineering to develop the domain expertise that allows them to be great data analyst if they want to change track later. or become someone who can actually integrate data and insights and provide lot of business value.

Core engineering teaches you soft skills, like I said people and business skills. There is going to be a cornerstone of how you are able to be a successful leader. It will tell you everything about leadership. If you want to learn about leadership, there is no other place to learn other than core engineering. Be it a production engineer, being a process engineer, equipment engineer, you learn everything there is in a practical way to know about leadership. There are cons, every pro has of course cons, but I think it is worth, you should also call this out.

The competition tends to be low, especially in the beginning years, it quickly changes much later in your career. As you grow in your career, as you get more leadership experience, as you have more experience business and technical skills that gives you a competitive advantage. But to begin with if you look purely from the beginning starting point you would find that there are other branches for example, computer science or data science that pays more. I would strictly again think of that as a con only in a short term if you have the resilience it should not matter at all.

In fact, the dynamics changes much later when you go ahead in your life. in terms of growth opportunities, in terms of ability to move across sectors, if you take a feel like consulting, if you take a feel like say software, there are lot more companies out there, right. There is a dime a dozen companies doing dime a dozen products. So, we can quickly switch, if you are not happy with one company, you can find a better role in another company. production is not of that nature. There is significant investment in terms of machinery, equipment and establishment to make things happen.

So, there are in that many companies within especially the sector you are in that makes it possible for you to switch. So, for example, if you are working in for example, let us say you are working as a engineer working in say a chemical or H process in say semiconductor industry, you would find that you are pretty much like classified as a expert within that space and you find that it is not possible for you to shift to any other process. For example, let us say process integration within that within the same company or even other company, it takes a significant more effort to change compared to say for example, with software. So, keep that in mind I would say develop expertise in a certain broad sector to begin with for a core engineering field, but also expose yourself with other opportunities within the same company

right do not be localized because that gives you kind of like the broad view to actually move across different sectors.

There is definitely a lower innovation rate compared to say software. So, software the nature of the product is not it is driven by customers versus most of manufacturing is driven through things like compliance and industry trends. So, you would find that the rate of innovation is much limited. ability to develop products take longer compared to say those in software. So those people with a short attention span, it might make sense to be in software or associated field, but if you have a longer attention span, if you are ready to put in the effort, definitely manufacturing makes sense.

or anything related to core engineering makes sense. Finally, I want to call out on work-life balance. Work-life balance would not be that great to begin with, you would be expected to work on shifts, you would be were expected to shift means like you would be working sometimes in the night, sometimes during the day, you would be expected to put 12 hours of effort on weeks at a time, you might have to work 6 days a week. So, these are expected from a production or any sort of like core engineering company. So, the work-life balance would not exist initially, but I would always look up or these and say this is not as bad compared to say finance or consulting.

It is compared to say those ups and downs of software cycle more evened out. So, if in terms of total effort, I think it kind of works out to your advantage, but it If you are someone who wants to like spend like significant amount, I would work only 8 hours a day and not not something more, I would I do not want to work on shifts, I do not want to work on certain times of the day or certain times of the week, definitely core engineering jobs may not be the your cup of tea. I want to switch now to start-ups, like I mentioned start-ups would be the space that is kind of booming within India. So, most of the growth is happening today with start-ups, lot of new ideas over there, lot of new sectors out there, that is all where most of the jobs are. So, irrespective of the field you are in, I would expect that there are lot more openings, lot more chances in start-ups.

So, this would be a significant sector for people to focus upon. When we talk about startups, there are two kinds of work. You can work by creating a startup on your own, that is called create a startup or you can work in existing startup. So, always the two options that are open to individuals as they graduate from university. Question is which would you which is preferable really depends upon a couple of things here. Can you manage the risk of standing out with starting out with no salary? Are you someone who can take the burden of months or a year with no salary, but having the responsibility to pay the people who work for you? Do you have something called ability to find the right product for the market? I think those are questions that you will have to ask yourself, there is a entire new question on should I start up or not, but I think a larger question on can you last it out, do you have the will to actually identify what is required for the market and create something of value.

I think if you can create something of value on your own and build a team, creating a startup is good, if you do not know which is mostly the case with most people. you are interested in startup, but you do not have the kind of like skills yet to create something on your own. It is always a great idea to identify startups that that are working in the space that you are interested in work with them. So, if you if you are thinking of a startup, I think a natural place should be that hey, let me go do an internship with a certain set of startups that I like in a certain space and then see how things are like see what the work life is, what is the technology that they do. And

then from there let me learn something from that space and then and come out with something like a growth much later and start something on my own much later.

Who should join a startup? Startup is not for anyone, it needs certain set of like expertise, so if you are someone cross domain expertise, you are looking able to find the kind of value for a customer. Yeah, you should think of a that is that is that is something for a that is either something I can create or if you are passionate about like trying to find the value for a customer, then you can work with the startup because that is where you are going to have a large touch point with customers. Compared to a traditional role, you will be less isolated from what customers want, what the market demands by working with the startup. If you have like analytic exposure, if you have like good skills, cross domain skills, you are not someone who is just limited to say I will do only x, because startups do not have, cannot have the luxury of persons doing only x. They would have people who pitch in try to take responsibilities as and when, as and when it arises, if you are that kind of person who can actually switch.

get domain expertise, have a quick learning curve right and you are open to learning by actually practically looking at the problems as and when they arise and not be frightened of the challenges that they arise, definitely startup is something that you need to look at. This is a very very interesting curve and I would like a little bit of time to look through this. So, this is the US treasury I think 10 year yield rate over the years and what in a quick summary what this means is. This is the base interest rate that is going to exist on top of any loans or anything else that you take off, that is a key takeaway from here. So, for example, if the US Treasury rate, 10 year yield rate if it is around 0 percent, then there are additional risks that come, but you can expect a mortgage loan let us say at about 3 percent, 4 percent, right.

If the interest rate shoots up to say 5 percent. there are other risks that add up. So, your mortgage layer loan for example, would now be like about 12 percent or maybe 14 percent right. This is just for US, but it has its ramification across the world. What is interesting about the curve is if you look from 2010, 2020, 2010 to 2020 the curve has been always coming down right on the average it has come down that is the cost of acquiring capital for a startup is cheap. So, from 2010 to 2020 it has become almost like around 2020 it was used to be almost near 0, so you would get loans from venture capitalists at a very low rate and consequently the ability for you. So, if you get loans from for example, from a capitalist at let us say let us say 4 percent interest rate, you would need to deliver only more than 4 percent right, maybe 10 percent to actually show value.

But if someone actually delivers that loan to you at 10%, you will have to now show more than that. You will have to show 20%, 30% growth, which is a very difficult proposition, right? Compared to 10% growth, 20% growth is exponentially harder, right? So, if you look from 2020 onwards, you would see that the yield rates has shot up. So, currently it is among the highest, it is about 5%. So, that means, the loans have the money, the investment money both from venture capitalists as well as any loans that you can get right now, it is extremely expensive. So, the question remains, if funding is that difficult and startups normally rely on funding to survive, how is it possible to do startups at this point of time and that is an interesting question. Should you be doing a startup now when the interest rates are so high? I would say not now, that is my take away from this slide.

There is of course a talk about like interest rates being slashed, I expect it after the US elections or very close to the US elections which is somewhere in the December of this year 2024. So, consequently it is the rates would come down and consequently it might be a better

time, but as it stands today those are speculative thoughts, but as it stands today the loan is really difficult, capital is really difficult, it is really a bad time for you to raise money and consequently it is a bad time to be in a startup. There are pros irrespective of it is you have a very high learning curve like I mentioned earlier, you can quickly learn about lot of skills that you will not learn in a traditional company. So, for example, there was a startup company that I was interviewing for when I was in San Francisco and I was interviewing for a traditional company. The role in a startup company required me to look at, it was a role that was equivalent to a executive VP of securities and the role in a traditional company was a director in that same security space right, in a software security space.

So, the responsibilities are very different. As an executive VP, I would be handling the entire things like the profit and loss, I would be looking at the growth, I would be looking at everything else. Traditional company, I would have much less of those opportunities. So, this is an example, the point being that startup encourages people to do lot of work across sectors and therefore, you would grow a lot. The promotions are very fast. compared to a traditional company and therefore, if you are someone who likes to grow fast, work on hard problems, work on tough problems, work on challenging problems, work without caring too much about like balances of work life, I think startups are a great place to be.

Working in startup, you will of course, pick up different skills and therefore, you become really good person for any kind of role later. You are also a great person or a great fit for things like MBA program, if you consider that. people who like who are averse to risk should not be taking startups and consequently process people who are not bothered by risk who can manage for example, fluctuating cash flows, fluctuating opportunities, you have certain reserves with you, your parents are rich or let us say you have a certain skills or a specific set of technical skills that is nobody else in the market has, then startups is a right way for you to leverage the maximum out of that. Cons, like I said the markets are bad, currently it is bad, it is traditionally there is lot of fluctuations in the market, risk is very high with the startups, you never know when it is going to crash. So consequently people would have lot of layoffs, so startups are known for layoffs, so do not be frightened of losing a job or seeing a fluctuating market if you are in working in a startup.

your compensation varies actually there is a there is lot of a paper value that comes from say stock stocks that are given and actual compensation may be a little lower, but overall compensation might be pretty high it really depends on how you look at it. So, if you are someone who has lot of faith in the company you can find that the paper value that is paper stocks might actually be. So, if there was a company like let us say Amazon before it became public. If you had stocks in Amazon once it became public you are a you are a multi-millionaire right or if you are someone working for these big companies today's like for example, I do not know Paytm and others it is Paytm, Zomato there is a good chance of things working out really in your favor. So, paper stocks might really be valuable, but compensation tends to be a little like real paper like dollar or rupee compensation tends to be lower compared to traditional rules.

You are expected to do multiple roles of your someone who says hey I have only this domain expertise I will do only this. Startups probably not the best place to be because the founders and the team themselves do not know what kind of switch or work they would have to take up going forward. Finally, your success is also tied a lot to the startup success. So, I have had a lot of friends who have come back to working in traditional companies who have had like a decade

of experience in startups, but they did not learn anything from it because these startups did not really make cash from the whole process, right.

So, it is something that you would want to take a look at. Your fate is tied to what the industry is and specifically what the company is. So, I want to come to the end of today's talk. There is different things that we talked later to pros and cons. Hope these are the factors you would consider as we go forward look at your roles within different sectors and decide what you want to do. All right folks, cheers.