



PU CHRONICLES
SUMMER INTERNSHIP EDITION
AY 22-23

PREFACE

Internships, for some, it's the one single thing that matters, for others it's just another piece of the college puzzle that shapes our future. Without a doubt, it is a life-changing event or process in a student's college life. Undoubtedly, one of the key factors that contribute to it is guidance from seniors. We have decided to streamline the process a little, so you can focus more on the actual preparation than trying to get a hold of them. We hope that you find these Chronicles helpful in the same. Some general tips for internships:

- Think and decide well in advance if you even want to appear for the internship process.
- Prepare for internships. A lot of people regret their casual approach later on.
- Pick the companies you want to sit for (check eligibility, profile etc.) wisely. This does make a difference.
- Stay well informed always. Cooperate and keep in touch with the PU Team.
- Keep your motivation levels and energy high through all the ups and downs. Don't lose hope yet!
- Do not hesitate to contact seniors (alumni) for help, even the ones you do not know. Trust us, they do help! A word of caution. Internships is an extremely volatile area and changes based on a number of factors such as market conditions, recruiter relationships and business constraints.

Please read through the document with the awareness that the trend for a certain year may not be the trend for the next year. For instance, a stream that did not do well in a particular year may well be the best placed in the following year. The rounds and processes conducted by a company in the previous semester may very well differ this semester. Hence, be the best you, rest will follow! And rest assured that the Placement Unit is always there for you! All the Best, Placement Team

DISCLAIMER

All the feedback is provided by the students who have secured internships in various organizations. We have tried our best to ensure that every detail in the PU Chronicles is correct. The Placement Unit assumes no responsibility for errors or omissions in the contents of the Chronicles.

The Placement Unit reserves the right to make additions, deletions, or modifications to the contents of the Chronicles at any time without prior notice.

TABLE OF CONTENTS

A.	Preface	1
B.	Disclaimer	2
C.	Table of Contents	3
1.	Accenture	5
2.	Adobe	7
3.	Arcesium	12
4.	Arista	19
5.	Atlassian	27
6.	Batton Inc. Japan	32.
7.	caterpillar	33
8.	Cisco	35
9.	CRED	44
10.	DevRev.ai	45
11.	ExxonMobil	46
12.	Google Hardware	49
13.	IBM	51
14.	Intuit	52
15.	Jaguar Land Rover	56
16.	JSW Group	59

17.	Microsoft	65
18.	Moveworks.ai	72
19.	Palo Alto Networks	73
20.	PayPal	77
21.	Publicis Sapient	79
22.	Qualcomm India	81
23.	Schlumberger (SLB)	85
24.	SKF	88
25.	Sprinklr	91
26.	Standard Chartered	95
27.	TCS research	103
28.	Texas Instruments	104
29.	Uber	111
30.	Visa Inc.	113
31.	Walmart Global Tech	120

Accenture

Data Science/ AI

Data Analyst

Gurgaon/Bangalore/Mumbai

Stipend offered:90000

CGPA:6.26

Recruitment Procedure:

Round 1: Assessment Had a few sections like logical reasoning, data interpretation, basic coding questions. Fairly simple and straightforward, negligible CS concepts needed. It was more a speed thing as there were quite a few questions. Round 2: Technical Interview Basically it wasn't the conventional coding interview (for me) because my degrees are M.Sc. Chemistry and B.E. Mechanical and I don't have that sort of background. Discussion on my resume for around 30 mins because I had previously done an internship which I was saying would be useful in the role I was applying for. He decimated everything on my resume so make sure you're certain of what you're putting on there. He asked me a few SQL questions, the difference between queries and stuff like that. Then asked some almost general knowledge type questions where you can use your courses in daily life. Like I've done a course called Polymer Chemistry so he asked me where polypropylene is used (PPE kits). It seemed like he just wanted to see how I would deal with that. He grilled a bit during this round but it wasn't too bad. Main things asked here: 1. Resume 2. Technical questions 3. Put you on the spot questions Make sure you ask them 1-2 questions about the role or something; it leaves a good impression. Round 3: HR+Final Interview It was with the Head of AI Development of Accenture, India. Asked me to introduce myself and why I applied for the role. He also browsed through my resume and we spoke about that for a bit. Relatively short interview (20 mins) and towards the end we were just talking about his engineering experience and stuff like that. Main things asked here: 1. Introduction 2. Why Accenture 3. What skills have you learnt previously that you think you can apply here

Important Topics and Subtopics to Remember

This is a more application role and doesn't require any such courses. If you think that the JD excites you a little bit also, I would suggest you go for it.

Sources of Preparation

Some logical reasoning and data interpretation questions if you can do; revise SQL and Python a bit.

Any Additional Comments

Show that you have some business acumen as the role requires it.

Adobe

IT

Product Intern

Stipend offered:100000

CGPA:8.26

Recruitment Procedure:

Round 0: Resume Shortlisting Round 1: Coding test It consisted of 2 questions. Both were of medium/hard level. One of the questions was related to Graphs. So make sure to learn all the basic algorithms related to Graphs well. The other question can belong to any other topic. After this, 10 people were shortlisted based on partial scores for the interviews. The results were declared the next day only. Round 2: Technical Interview The interviewer was nice and asked me to introduce myself. He then asked me to code DSA problems. I solved 2 of them live and for the third one he asked me to explain to him the approach as not a lot of time was left. The questions were easy and topics covered were Binary Search, Two Pointers and Arrays. So be thorough with your basics in these topics. He then asked me standard questions related to OOP and DBMS. The interview went on for around 1 hour.

Important Topics and Subtopics to Remember

They asked questions related to OOP and DBMS. Make sure to revise these before the interview.

Sources of Preparation

GFG, Leetcode, Interviewbit

Any Additional Comments

Adobe - Media and Data Science Research (MDSR)

Data Science/ AI

Research Intern

Noida

Stipend offered:100000

CGPA:9.44

Recruitment Procedure:

Round 1: Resume Shortlisting I'm mentioning this because the resume shortlisting for MDSR seemed to have been done thoroughly, almost as if someone read through the resumes. The candidates selected were those who had decent ML projects or some ML background on their resume. Point being, put decent ML projects you have on your resume and present them thoroughly. Round 2: Coding Test I don't remember the questions, but there was one easy and one hard question. The easy question could be solved by just sorting and iterating - nothing special. I couldn't do the hard one. It seems that not a lot of weightage was given to your performance in the coding test. Round 3: Interview - 1hr This was by far the best interview experience I've had. The two interviewers were welcoming. I introduced myself, and talked about my interests. The very first question they asked me was if I planned to go into research, or software development. I said that I had been working in ML research for a few months, and that I wasn't currently interested in software development. I went into detail about a project on Implementing the UNet research paper for image segmentation. Frankly, this was quite a simple project I did over a summer weekend. But I made sure to talk about every single design decision that went into writing the UNet model, the reasons behind them, any alternatives I could've taken, and the reasons for not taking said alternatives. More concretely, I talked about the data, the preprocessing, the choice of using a convolutional network for images, the model's U-shaped architecture, the various loss functions for segmentation, the evaluation metrics, any ablations. As an example, they asked me why I use max-pooling in my network. I explained that a) it prevents the model from overfitting on random noise in the data, and helps extract useful features instead b) not using max-pooling would create a model too large to fit in memory. I further extended their question by explaining why I didn't use avg-pooling instead. Point being, pick a project, learn all the ins and outs of it, and go into serious detail about it. For every question they ask, give 2-3 different explanations, and if possible extend their question. The interviewers told me on multiple occasions that they were impressed by my depth of knowledge. After this, we moved onto some general questions about activation functions, loss functions, etc.

and reasons to use/not-use them. As an example, they asked me to show mathematically on paper why Cross-Entropy loss is favorable over MSE loss for classification tasks. They also asked me some very basic linear algebra questions, things about matrix multiplication complexity, and number of solutions to systems of linear equations - just things you learn in the M2 course at BITS. The interview concluded with a coding question on google docs. I found this a bit bizarre, given all the ML discussion we had. The question was about finding all instances of words in a dictionary, given an input string. An example: Input = "catsanddogs", WordDict = ["cat", "sand", "cats", "dog", "and"], Output = "cat sand dogs" or "cats and dogs" I wasn't sure how to do this question. I came up with a recursive solution that could partially solve it, but time ran out soon after. They told me that although I couldn't solve the question, at least I knew how to approach and code up a partial solution. Overall, I left the interview feeling very confident. Though I struggled with the coding questions throughout the process, the interviewers recognized and appreciated my depth of ML knowledge. They knew their stuff thoroughly, and the interview felt like a conversation about all the things that went into my project.

Important Topics and Subtopics to Remember

Probability and Statistics - distributions, sampling, hypothesis testing Linear Algebra (M2) - matrix ranks, systems of linear equations Machine Learning (not necessarily as a formal course) - regression, decision trees, PCA, SVD, Bayesian networks, SVMs, etc Deep Learning (not necessarily as a formal course) - everything I talked about in my project Object Oriented Programming (You'll need this when you code up models) Operating Systems (You'll be working with high performance servers in DL research, better know how an OS works) Data Structures and Algorithms (Know how to approach problems at the very least)

Sources of Preparation

Most of the courses can be done thoroughly in BITS. If you can't, you'll find many online sources in the rest of the chronicles. However, you will need some extra knowledge for ML and DL. DL - Stanford CS231n on YouTube. I cannot recommend this course enough. Most of my in-depth knowledge came from this. The lectures introduce all the design decisions you can take, and the reasons for each. More importantly, this course comes with 3 fairly difficult but very well designed code assignments. These assignment clear up many topics and were the key to getting that in-depth understanding. This will take about a month to complete. ML - Stanford CS229 on YouTube. Another high-quality Stanford course for ML. Projects - Probably the most important thing for this role. Pick a recent DL research paper, or a SAILDL induction assignment question, study it thoroughly, and implement it! DSA - solve a few dozen mediums on leetcode. this definitely isn't enough if your goal is software development, where coding questions have all the importance. Interview: Pick a project you are confident in, and talk as much as you can about it. Question every part of it. Do not pick a project you don't fully understand, or is too vast to explain in an interview.

Any Additional Comments

DL Research is a very different (and highly rewarding) experience compared to software

development. Be clear on if you can put in the patience and mental effort that goes into it. Feel free to contact me!

Adobe MDSR

Data Science/ AI

Research Intern

Noida

Stipend offered:100000

CGPA:9.03

Recruitment Procedure:

Round1: resume shortlisting Round2: Coding test, the coding test didn't have much value and most of the weightage was given to the resume shortlisting. Round3: Interview, asked about our projects and basic probability and ml questions

Important Topics and Subtopics to Remember

ML, DL, PNS

Sources of Preparation

Coursera, YouTube

Any Additional Comments

Adobe

Data Science/ AI

Research Intern

Noida

Stipend offered:100000

CGPA:8.13

Recruitment Procedure:

Round 1: Resume shortlisting Round 2: Technical Interview The interview was for a machine learning research role and so was mostly about 1 project in resume. I was asked about the motivation behind the project, alternative methods to solve it and why I didn't use those alternative methods. The interview lasted 1 hour. Since my resume was heavy in Reinforcement Learning (RL), there were many questions in RL somewhat related to my project. For every answer I gave lead to a follow-up question which was more in depth about the specific concept and tested my knowledge of RL. The questions asked were didn't have a direct answer. I had to motivate my answer with other concepts and explain its relevance. My resume had a project in Jax and I was asked to explain why I chose to use it. Every single interviewee had a personalized interview which was mostly about a project from their resume in depth followed by the concepts surrounding the ones used in the project. Some also had a couple probability/statistics questions

Important Topics and Subtopics to Remember

Machine Learning Deep Learning Probability & Statistics Topics related to projects in resume

Sources of Preparation

Machine Learning: 1)

<https://youtube.com/playlist?list=PLoROMvodv4rMiGQp3WXShMGgzqpfVfbU> 2)

<https://youtube.com/playlist?list=PLZ9qNFMHZ-A4rycgrgOYma6zx4BZGGPW> Deep Learning:

<http://cs231n.stanford.edu/> Probably & Statistics: 1st year course at BITS is enough Resume

Project Topics (RL):

<https://youtube.com/playlist?list=PLqYmG7hTraZDVH599EltIEWsUOsJbAodm>

Any Additional Comments

The ability to sell your project and convince about your research capabilities

Arcesium India Pvt. Ltd.

IT

SDE

Hyderabad

Stipend offered:125000

CGPA:8.95

Recruitment Procedure:

Coding Round: The coding round for consisted of 15 MCQs (Math and Aptitude), 15 MCQs (OOP, DBMS, DSA) and 2 coding questions. The coding questions were relatively easy. The second one was a simple level order traversal in a binary tree and the final answer was to be reported after rounding off to certain decimal places. This coding round was more about speed because the questions themselves were not difficult. Round 1: Technical Interview: (Virtual) I was first asked to introduce myself and then the interviewer introduced himself. He then asked me the 'Two Sum' problem for which I gave him the brute force solution ($O(n^2)$) and then an optimized solution (using hashmaps) ($O(n \log n)$). He asked me to further optimize it, I was able to give him the two pointer ($O(n \log n)$) solution after some hints. He then asked me the 'Three Sum' problem, as for the Two sum problem, I gave him the brute force and then 2 other optimized solutions. Then he asked me to do the same for the 'Four Sum' problem, for which I was discussing an approach (different from the ones above) but due to time constraints, he asked me to leave that and code the most optimized solutions for the 'two sum' and 'three sum' problems. Finally he asked me if I had any questions for him, and then I asked him why he had switched jobs to join Arcesium because he had mentioned this at the start of the interview. Round2: Technical Interview: (Virtual) The interview started with me introducing myself and briefly discussing the projects mentioned on my resume. He then asked me which language I'm comfortable with (I answered C++) and then started asking questions. He started by referencing one of my projects which had used an authentication service and a database to store users' data. He asked if I knew how the authentication works under the hood, which I didn't know. Then he asked me about the different indexing techniques in databases, I explained clustered indexing but I couldn't properly recall non-clustered indexing. Then he asked if the database starts receiving a lot requests then the end-users would face latency issues, so how would you fix it. I answered using clustered indexing, then he pointed out the problem with that design which was a motivation for non-clustered indexing but since I didn't recall that I was not able to fix the problem he pointed out. Then he asked about the diamond problem in OOP which I didn't know of because I had done OOP in Java, and the diamond problem only exists in C++. Then he asked about the concurrency control in databases, initially I was not able to answer properly because I could not recall everything, but with a few hints I was able to clearly explain

everything. Further, he asked me about logs and recovery techniques which I was able to explain well. He then asked if I had studied OS but since we had just started that course, I said no. Lastly he asked me one DSA question, which was the Shortest Path Algorithm in graphs, I explained both Bellman-Ford and Dijkstra algorithms with their merits and demerits and running time complexities. Finally he asked if I had any questions for him. Round 3: Technical Interview: (Face-To-Face) The interview again started with me introducing myself and my projects, but this time, the interviewer was really intrigued by one of my projects so he started asking about that in more detail. The project involved knowledge of Networking so he asked me some very basic questions (I had told him that I had not formally studied the Computer Networks course) such as the basic workflow of an HTTP request and some more. Then he asked me to solve a variant of the 'Rat in a maze' problem (can be found online), which is a dynamic programming question, but he made a few modifications to the question so DP was not directly applicable. So I started thinking of a solution and discussing it with him, and after about 10 minutes of discussion, he seemed to be convinced with my approach and moved on (even though I hadn't completely solved the problem yet). Finally he asked if I had any questions for him, and this time I asked him about what I would be working on during the internship if I was given an offer. We then discussed this in great detail for about another 10 minutes. Round 4: HR Interview: (Face-To-Face) The interviewer started by asking me about the interview experiences I had throughout the day, and then he asked me what hackathons and competitions I had participated in over the past 2 years and my performance/results in them. He asked me a design question. He asked me to briefly design/describe the look of a possible Alumni website for an organization. With his help, I was able to give him a reasonable layout of a website. He then asked me to list the reasons why anyone would want to visit the alumni website of their organization, I was able to give him a few reasons but he insisted that I was missing out on an important one but eventually we moved on because I couldn't think of any more reasons. Then he asked me about my plans to possibly do an MS or go for higher studies, for which I told him that I hadn't decided anything yet and I was still exploring what interests me the most. Then he asked for my work location preference and if I had any questions for him. I just asked him if the internship would be remote or offline.

Important Topics and Subtopics to Remember

OOP, DBMS (Indexing, Concurrency, Recovery, Transaction management are most important), DSA If possible, prepare for system design questions (some candidates were asked system design questions in round 2)

Sources of Preparation

OOP: GeeksForGeeks and PU notes DBMS: GeeksForGeeks and Lecture notes DSA: Leetcode, GeeksForGeeks and Lecture notes

Any Additional Comments

Arcesium coding round was relatively easy but the interviews are very rigorous and require a good preparation/understanding of the subjects. Also, as illustrated in my case, it is always

better to say that you don't know something rather than give wrong answers. Lastly, to answer questions like "Do you have any questions for me?", pay attention to what the interviewer says throughout your conversation and try to ask something related to that, interviewers like the fact that you were listening to them.

Arcesium

IT

SDE

Bangalore

Stipend offered:125000

CGPA:9.74

Recruitment Procedure:

Coding Round: The coding round consisted of 4 timed sections: Aptitude reasoning (20 mins), Technical reasoning (15 mins), Programming question 1 (20 mins), and Programming question 2 (25 mins). **DON'T WASTE YOUR TIME ON JUST THE FIRST TWO SECTIONS.** There is a recommended time given by them for each section, follow that and move on when that time ends. You can always come back to the earlier sections at the end, but do marks answers for each question if no negative marking. The coding questions were very easy. The first one was a simple 2 pointer question, and the second was a simple BFS question. I did 9 and 12 questions in the first two sections, then moved on to the programming questions, completed both and came back to the two sections and finally did around 12 and 13 (and then marked others randomly). First interview: (45 mins round - online) The interview asked me for an introduction. Then he said he'll ask me two coding questions. If i can answer at least one correctly, I'll move on to the next round. He said he wouldn't ask me to code (although he eventually did, taking all the first 40 mins for the first question, and then he just discussed the 2nd question) The first question was given the start and end time of meetings, find the minimum number of rooms such that all meetings can be held, given one room can only hold one meeting at a time. Second interview: (Offline - 2 people) First an introduction. U can lead them to your projects by mentioning your projects as the last thing in your intro. First interviewer's questions: They asked me in depth about the languages i know. Started with which language do you know: I replied c++ for dsa, but did oops in java coz java is used to teach oops. Q1. Why is Java platform independent and C++ platform dependent? Java uses bytecode and c++ use instruction set architecture which differs from machine to machine Q2. What is the canonical pool of string, do

you know about it, and what are its benefits? (And what is the intern method?) Q3. What are immutable classes (or objects)? Give an example. (I gave string) Follow up question: So if a string is immutable, is this code block illegal? `String str = "xyz"; str = "abc";` (It's not illegal - a new object is created everything a string is "changed") Q4. Gave me a sample class definition and told me to make it immutable class `Person {int id; String name; Date dob; and all the getter and setter functions}` How to do it? Put `final` before all the fields. Remove all the setters because if fields are final, they can only be given value through a constructor, and create a parameterized constructor. One more important thing, return the date object directly in `getDob` will return the actual object by reference, allowing you to call methods on it, making it mutable. To combat that, create a copy of the object and return that using `clone()` and then type casting Q5. Do you know what concurrent hashmaps are? (I didn't know. I told him so.) He explained what they are (allow concurrent access to a hashmap free of race conditions) Told me to come up with a simple algorithm to allow max concurrency (couldn't do it other than timestamp based, or completely serial) all you have to do is wrap any race condition possible code in the keyword `synchronised` (he told me this i didn't know). Second interviewer's questions: Given a linked list and two numbers `m` and `n`, reverse the linked list between the `mth` and the `m+nth` node. Asked for a pseudo code, but i wasn't clear so he asked me to write a small code for it. Satisfied with the code. My resume had `ctfs` mentioned, so he asked What is an SQL injection attack, how do you prevent it, can you give an example of a payload? Told them i love Pokemon, so did they! Technical round 3 (online): Nothing much was asked at all. Just discussed my projects (only had one - PS1 project). Talked about the pandas library coz i had mentioned i had used it. Nothing else, I just asked him how long he's worked there, what does he do? HR round: Introduction, then random talks. What are your weaknesses? If you're a college, making a website for your alumnus, what all would you have in it?

Important Topics and Subtopics to Remember

OOPs is important for this company. DSA is somewhat important. DBMS wasn't asked much from me.

Sources of Preparation

All the topics I used my CDCs slides / coursebook for preparation. For DSA, i practiced questions from practice.geeksforgeeks.org

Any Additional Comments

Just think of it as a conversation between you and the interviewer. Don't let the nerves get to you. Answer truthfully. If you don't know something, just say you don't and move on. They have to ask a lot of questions in very less time so give them the opportunity to ask you more questions you might know than being stuck on one you don't.

Arcesium

IT

Software Engineering Intern

Hyderabad

Stipend offered:125000

CGPA:8.1

Recruitment Procedure:

Resume + CG shortlisting: Mostly people with 8+ cg were given the link to coding round. The next round was an online assessment. Aptitude + CS fundamentals: 15+15 questions, along the lines of work-time, unitary method interest calculation, OOP DBMS MCQs(theory and find the error/output of the code snippet), pointer arithmetic. Coding Questions: 2 questions, on the easier side, one was simple bfs on trees, the final answer required some floating point adjustment, so if using java check it out once. the second one was related to sorting and prefix sum. Around 16 students were shortlisted for the technical interviews. Technical Interview 1: It was conducted on Hackerrank code pair I was asked 1 DSA question: Given an array A of N numbers and a K where K represents the maximum number of operations you can do. In one operation you can choose any number from the array and double it. You have to maximize the value obtained by taking bitwise OR of the complete modified array. Constraints: $0 \leq A_i \leq 10^6$, $0 \leq k \leq 10$ Initially I started with a DP solution and spent around 10-15 minutes on it before realising it won't work, explained the interviewer properly why it wouldn't work, then I took a closer look at the constraints and observed that we will have to do the k operations on a single number(10^6 is basically 20 bits, and k is less than 10, so the integer overflow won't occur). So I explained my solution along with coding it and submitted it quickly and it got accepted. The interviewer told me that he was supposed to ask me 2 questions but we were out of time. After the first round most of the other students had done both the questions but some were still not selected for the next round while I did, so I'll say not to worry much if you mess up a bit, just explain your thoughts clearly, walk the interviewer through what is going on and communicate well. Around 10 students were shortlisted for the next round. Technical Interview 2: The interviewer was great. He told me that he will be asking me questions about OOP, DBMS and asked me if I had done OS, to which I said I will be doing it in the coming semester. It was more of a conversation rather than him just asking me questions. He started with OOP and asked me about my preferred language(mine was Java). Then he asked me about default parameters in constructor in java, and if java allowed it, how would I simulate it if I had to implement it. Then he asked me about functional overloading, overriding and what is the need of having them and to give some real life scenarios in which I might use them. He asked me about static/non-static

parameters, functions. Then he asked about final methods and when they will be used, and how it will interact with inheritance and polymorphism. Then he moved on to DBMS. He started by asking me what is the need to even have a database. I started to explain how data is useful for recommendations and can be processed to use for variety of reasons, he then clarified why not simply have a program to store the data, I told him some reasons along the lines of memory optimization as we agreed that Hashmaps would be the way to go to store the data, but after some discussion he told me that he was looking for the answer that database is unaffected by power outages, whereas a program would lose all the data once it terminates. He then asked me about ACID properties, talked about consistency (used the ATM transaction example) He then asked me to write some SQL queries, I told him I wasn't well versed with it, so I wrote some queries and he moved on. He then asked me the difference between SQL and noSQL databases, and there was a deep discussion about how documents are the building blocks of the noSQL databases and even talked about file systems of unix based OS, I didn't know much about noSQL, so even I started asking him about the possible limitations it might have and tried to understand it well. He then asked me if I had any questions for him, I asked about his role in the company, and what work would interns be doing. I felt our discussion played a major role in me getting selected, asking about things I didn't know and building up on it helped. Around 5 people made it to the next round. Technical Interview 3: This round was offline, and it was with an Engineering manager and an alumni, they were friendly and after the introductions they asked me about the projects I had mentioned(I had two, one personal project and one from PS-1), they didn't seem to be much familiar with the technologies used in the projects so they just asked me how server client model works, and how a video streaming app might work. They asked me why I chose the framework I did and not some other tool, so be prepared for questions like this if you use flutter or android native, and know the pros and cons of either. Then they asked me a logical puzzle, There are 4 people, a torch and a bridge, it takes them 1, 2, 5 and 8 minutes for them to cross the bridge respectively, atmost two people can cross the bridge at a time and when crossing the bridge the torch must be with them, find the minimum time to get all 4 people on the other side. After a few clarifications I answered 15 which was correct. Take a look at gfg for riddles if you want to prepare for these types of questions. Then they asked me if I had a linked list, and I had to delete a node given its address, how would I do it? I gave a simple algorithm, to maintain prev and curr and check for the address, and explained the time complexity to be linear. They asked if I could optimize it, I discussed it but couldn't, they said it was fine and then asked me if I had any questions for them, I asked about the CTFs and other events they hold for interns and some other questions. 3 people made it to the HR round. HR round: He asked me to introduce myself, and asked me about my family. He then asked me if I had to build a website for alumni relations, how would I do it, what components would it have etc. He then asked me why alumni would be interested to be in contact with the students. I answered along the lines of them having the same relations with their seniors and they also want to give back. But I felt he was looking for something more. Then he asked a few more things and it was done. I got a call to report to PU in the evening(what happened there is a story for another time), and finally all 3 of us were selected.

Important Topics and Subtopics to Remember

Data Structures and Algorithms, Object Oriented Programming, Database Systems, Aptitude preparation

Sources of Preparation

DSA: codeforces, GFG articles(GFG practice), leetcode OOP:
<https://www.geeksforgeeks.org/object-oriented-programming-oops-concept-in-java/>
<https://www.javatpoint.com/java-oops-concepts> DBMS: <https://www.interviewbit.com/dbms-interview-questions/> <https://www.geeksforgeeks.org/dbms/> Aptitude:
<https://www.geeksforgeeks.org/top-20-puzzles-commonly-asked-during-sde-interviews/>

Any Additional Comments

After the interviews thank the interviewer and ask some questions to the interviewer(about what he does and what will you be doing if selected), as it shows that you are interested to join the organisation. Be confident, communicate well and don't stay quiet for too long, talk about what you're thinking, the interviewer might give some hint if you are way off. Be prepared to answer questions about everything on your resume. Do not mention anything you're not confident about. Don't jump into writing code right away, figure out the approach and edge cases before coding. Also try to dry-run the code for a test case. All the best!!

Arista Networks

IT

SDE

Pune

Stipend offered:100000

CGPA:8

Recruitment Procedure:

Round 1: Coding round Questions were leetcode medium difficulty, topics were matrix, strings
Round 2: Technical interview Dsa Questions were leetcode medium difficulty on trees, hashmaps, graphs. There were a few OS and CN questions. Round 3: Technical/HR interview Oop based system design question with various parts and basic hr questions like why do you want to work for arista networks etc.

Important Topics and Subtopics to Remember

DSA, CN, OOPS

Sources of Preparation

Leetcode and gfg

Any Additional Comments

Arista Networks

IT

SDE

Bangalore

Stipend offered:75000

CGPA:8.32

Recruitment Procedure:

Technical round Q1) Given a Binary tree with an int data in every node, modify the function such that every node's data is replaced with the sum of the data in its descendants and itself.

Discussions: what is a tree? what is a binary tree? Brute force: (assuming balanced tree for complexity calculation) traverse the tree from the root ($O(n)$; n = total nodes in a tree), for every node, find the sum of its descendants ($O(n)$; n = descendants), Complexity $O(n^2)$; n = total number of nodes in tree Optimisation: Instead of the top-down approach, use the bottom-up approach `int sumBelow(node) { if (node==null) return 0; int sum= sumBelow(node.left) + sumBelow(node.right); node.val += sum; return node.val; }` Complexity $O(n)$; n = total number of nodes in tree Can this be done without recursion/function stack ? Can this be done without recursion? I could use my own stack which would push and pop nodes. Would it be faster? Yes but there would be not much of a difference. Would it be more complex to code? It was become a little more difficult to code but it would be doable. Estimate by how much it would become more complex? Maybe 7-9% Then I had to code it. I tried for a while but I could not converge to a solution. I got runtime errors. I didn't reach the part where I only had to correct my output (I didn't get any output). Then the interviewer told me that in fact the code becomes 120-150% more complex while doing this and not just 7-9%. And since this Stack is lighter than the function stack (as it does not have the additional overhead of local variables, etc.), it would definitely be faster but at the cost of a very complex code. I later coded it up when I reached back in my room, I realised that the recursive solution is much easier to code. Q2) Given an int array of length n , print the most frequent int in a window size of k (k

Important Topics and Subtopics to Remember

DSA, OOP, Networks and anything that's on the resume

Sources of Preparation

DSA: leetcode OOP: Java's Oracle Documentation

Any Additional Comments

Arista Networks

IT

SDE

Pune

Stipend offered:75000

CGPA:8.84

Recruitment Procedure:

Round 1: Coding Round This round was 15 MCQs + 2 DSA questions. MCQs were mostly based on Computer Networks. Since, this was a topic which no one had prepared for / covered in any course, most people did not know the answer to this. People who completed the DSA questions were selected for the interview. The DSA questions were of easy difficulty. If you have practiced basic questions, then you should be able to crack this as well. We were given 1 hr to complete both MCQs and DSA questions. Round 2: Technical Interview In this round the interviewer asked one very basic question initially just to test my knowledge about simple DSA. Then, the interviewer asked a question about LRU Cache. This is one of the most famous questions that Arista asks in the interview, make sure to prepare for it. The question was basically that you are given a video platform such as YouTube, you want to maintain a recent watch history which shows the top 10 recently viewed videos. Every time you watch a new video not in watch history, the last element should be popped and the new video should be added on top. Next, all operations should be done in $O(1)$. (Hint: see LRU Cache implementation) Round 3: Technical + HR In this round, the interviewer started with general questions about my projects that I did. Next, asked which language I was comfortable with. (If asked this question, prefer not to answer python, unless you know the detailed working of the python compiler). The interviewer asked basic DSA questions, but instead of programming it, she asked what data structures should be used in what problems. That is, given a problem, what data structure you would use. The data structures ranged from simple queues to priority queues containing pairs of integers. In both rounds, I felt like they were not looking for correct answers but for the thought process. Even if you don't know the answer to some question, just communicating with the interviewer about what you are thinking makes a huge impression. All the best!

Important Topics and Subtopics to Remember

DSA, DBMS, OOP, OS (recommended)

Sources of Preparation

DBMS - <https://www.interviewbit.com/dbms-interview-questions/> OOP -
<https://www.interviewbit.com/oops-interview-questions/>

Any Additional Comments

Arista Networks

IT

Software Intern

Bangalore

Stipend offered:75000

CGPA:9.05

Recruitment Procedure:

Round 1: Coding Interview Like all IT related companies, Arista held its Coding Interview to shortlist 20 candidates in the first round. The types of questions include, MCQs (Coding Basics, Operating System Concepts, Database Systems and C Programming Concepts). There were a total of 10 Questions for the coding round MCQs, they can vary each testing a different aspect of topics in Computer Science. There were 2 Questions for Coding Test, which was the second part of the test. The topics in the second rounds include: 1. Matrix Manipulation 2. Stacks and Queues 3. Tries 4. String Manipulation (Preferably using C functions, I was asked the reasons for using the functions in the next round) 5. DP (Basic Level) Note: You will be asked about the choice of data structure you made in the above questions in your next round. Round 2: Technical Interview 1 First Technical Interview start with a basic C Question have the following pseudo code: `void func(int i){ printf("%d",i); func(i++); }` and the question was to tell the output for the above function, this is one way to test the basics for C Programming and understanding of operators in C. Solve this one for yourself :). This was the starting question, treat it as a base line. The next question included writing the descending order of elements present in form of a binary tree and then applying condition on them in the next question. So, make sure you know about the traversals in binary trees. The next question was to make a dictionary stored in form of a tree, and tell about the working. This requires the understanding of tries. Search through that before going to the interview, they generally ask this every year. 2 Pointer Topic: A simple question for separating all the words separated by space in a string was asked, 2 pointer can be used. Round 3: Technical Interview 2 The 2nd Technical Interview was based on your projects in the resume, for me the interview asked about the practice school project I did in Reliance Jio Platforms and told me to discuss about the specifics of the project. Then he asked me about my favorite subject, and I answered Object Oriented Programming, I was then asked about a combination of System Design and OOPs. My problem was to create an elevator and go as detailed as possible. The whole implementation started from basics of an elevator to strong corner cases and how are they being handled. The interviewer will see your design style here and your thinking capability and depth here. Later part of the interview was more about what courses interest me and then asking me theoretical questions in Computer Science Courses. This was a relatively short one and they ended with positive reviews. (Tip: Always ask about the

review of your performance, it sometime add some brownie points)

Important Topics and Subtopics to Remember

Operating Systems (Will be useful in Job as well) Computer Networks (Algorithms - OSPF etc)
Object Oriented Programming Data Structures and Algorithms

Sources of Preparation

LeetCode for Data Structure and Algorithms GeeksforGeeks for OOP Preparation Campus
Internship Chronicles to know the types of questions asked and then study for them.

Any Additional Comments

There may be some topics that you don't know the answer to, that is okay, you can directly tell the interviewer that this will be covered in the coming semester incase you are yet to study that topic or say that I will cover this after this interview for sure. It is better to ask for a different question rather than mess up interview time in answering incorrectly.

Arista Networks

IT

SDE

Bengaluru

Stipend offered:100000

CGPA:9.1

Recruitment Procedure:

Round 1: Coding Round 2 coding questions + a couple of MCQs from CDCs related topics
Coding Question 1: Check if a string can be obtained from another string by rotating it any number of times in either direction. For eg, wertyq can be obtained from qwerty by rotating it once to the left. Coding Question 2: <https://www.geeksforgeeks.org/saddle-point-matrix/> Round 2: Technical Interview The interviewer was an alumni from BITS Goa and hence the intro was quite fun. We discussed about some professors and the campus and all and the interviewer was very casual and friendly. First task was to guess the output of some C code which tested the understanding of `a++` vs `++a`. Coding Question 1: variant of <https://leetcode.com/problems/subarray-sum-equals-k/>. The question was something like find the number of subarrays with equal number of 1s and 0s in a binary array. Coding question 2: find the k-th largest element in a BST in $O(1)$ space(excluding recursion stack space). I had to run the code and pass their test cases in the first question but only verbal explanation was required in the second question. Then he asked about stack allocation and heap allocation and some theoretical questions. All were very basic. Round 3: Technical Interview The interviewer seemed like a more serious guy than the previous round but was still helpful. Coding question 1: There was lot of wording in the question but the essence of it was to find the lowest common ancestor in a tree(not a binary tree. each node can have any number of children). I had to type out the pseudo code for the entire thing including the implementation of the tree. The interviewer was very patient and helpful when I got stuck somewhere. Coding question 2: Much easier than the first one and only verbal explanation was needed. Given a sorted array of integers, return the sorted array of their squares in $O(n)$ time and $O(n)$ space. $\{-2,-1,0,1,2\}$ should return $\{0,1,1,4,4\}$. Can be easily solved using 2 pointers. Project based questions: I had put MuP design project in my resume so he asked some questions about sub-routine calls, ISRs and instruction pointer and was decently impressed with my understanding. He also noticed I was using Linux and asked some basic questions on Bash. Then he asked about if I knew what the company did and told me some random info about the company in general. Overall, it was a nice experience and both the interviewers were helpful and fun to talk to.

Important Topics and Subtopics to Remember

DSA

Sources of Preparation

DSA- I had done a good amount of medium questions on Leetcode. other CDCs- I didn't have any extra prep other than coursework. Except maybe a last day revision before the day of the interview.

Any Additional Comments

Projects don't matter a lot so prefer to put some basic project that you actually did rather than something that may look good but you don't know much in detail about.

Atlassian

IT

SDE

Choice between Work from Home and Bangalore

Stipend offered:130000

CGPA:8.99

Recruitment Procedure:

The Coding Round Consisted of 2 easy questions and 1 tricky medium level question based on graph traversals and priority queues. Those who could solve all three were able to clear the coding round. Interview: The interview stage had 2 rounds, one was technical and the other was Managerial. Atlassian Technical round allowed us to use any resources available(including anything on the internet) we just had to present our entire screen while doing so. 1) Technical Interview: In the technical Interview, they asked me my favourite app and based on my response, they concocted a question based on DFS. The question was to code a small algorithm which gives recommendation of places from your current position. Two recommended places have an edge between them and are hence stored as a graph. They gave me a boiler-plate code based on OOP to start with but I was not confident in using their code and asked whether I could code from scratch. After coding the DFS question, they asked me what all changes I would make if they modified the problem statement in some way. One modification was if I had to show at max 'n' recommended places. Another modification was if the places had a recommendation ranking amongst them how I would handle it. And the last question was that given the repeated calling of the DFS function for different places of the user, how I could optimise the algorithm. I was unsure about the change and asked for clarification after which the interviewer gave me a small hint and I was able to solve it using maps. 2) Managerial Round: The Managerial Round started with asking me about my past experiences where I worked in a Team or where I brought about some innovation which helped my employer. The interviewer also asked some questions about my projects which I had put in my Resume. Finally, the round converged to the values of Atlassian. The HR had earlier sent me a some details about how the interview will proceed and hence I was prepared with the values and projects.

Important Topics and Subtopics to Remember

Topics: DSA -> subtopics: Graphs, Arrays, Priority Queues

Sources of Preparation

DSA Coursework, PU IT Preparation Sheet, Popular Youtube Coding Channels

Any Additional Comments

I was asked about my projects in the Managerial Round, this required me to have decent knowledge in the projects I had uploaded on my CV.

Atlassian

IT

SDE

Remote

Stipend offered:130000

CGPA:8.68

Recruitment Procedure:

Round 0 : Coding Round It had 3 questions, all questions were medium-level questions. The last one was on upper level of medium, Where we had to use a graph along with a priority queue to solve the problem. Shortlisted students were called for an Interview. Round 1 : (45-60 min) It was a graph question, which was presented in a different way, (Something like designing a music player system). The concept of object-oriented programming was also used. We were asked to code the solution on our local IDE step by step and explain it to the interviewer. Atlassian not only evaluated my problem-solving skills but also assessed my code quality, adaptability, conceptual thinking, decision-making abilities, and resourcefulness throughout the process. After I solved the questions, the Interviewer asked me follow-up questions, he added more constraints and all. I was able to answer follow-up questions. After a few minutes of the first round, I got the call for a second round . Round 2 : (45-60 min) This round was majorly for Project discussion. Make sure you know in and out of the project you have mentioned in your resume, They asked me questions on every aspect like the tech stack used, how it helped people, detailed description of the project. In the last 10 min, they asked me situation-based questions. Confidence is the key, be confident and honest with the interviewer. Finally 5 students were selected.

Important Topics and Subtopics to Remember

DSA , OOPS, DBMS,

Sources of Preparation

DSA : Leetcode, gfg OOPS, DBMS : class slides, gfg, Javatpoint

Any Additional Comments

Atlassian

IT

SDE

Bengaluru/Remote

Stipend offered:130000

CGPA:8.56

Recruitment Procedure:

Round 0: Coding Round: It had 3 questions. 1st ->string manipulation (Medium) 2nd ->Math (Easy) 3rd-> Dfs in graphs(Medium) 19 students were selected for interview round Round 1 (45-60 min interview) : In the first interview round, which lasted for 45-60 minutes, the focus was on data structures and algorithms. All candidates were presented with same medium-level problem (<https://p.ip.fi/8rpm>) that required an understanding of several concepts. We were asked to code the solution on our local IDE step by step and explain it to the interviewer. Atlassian not only assessed problem-solving skills but also looked for code quality, adaptability, conceptual thinking, decision-making abilities, and resourcefulness. Initially interviewer explained me the question and asked me which data structure to use, I immediately told him that it is a graph question. It was not a straight forward graph question, we were given a Boilerplate code and we had to complete some functions. Question involved some oops concepts as well. Basic idea in question was to find k nearest neighbors in a graph , which is a standard problem. Initially I was stuck how to make a graph with classes in C++ because I was not much familiar with oops in C++. But after a few tries I got it correct and the main part of implementing the logic of finding k neighbors did not take much time to implement. After the interview I thought that I could have done much better in the interview. After 5 minutes I got a call for next round. For this round I would suggest to have clear communication with interviewer its really important because they are looking all the aspects and not only coding. 13 were selected for HR ROUND HR Round :- The interview was online, Interviewer told me that if he is not looking at the screen so don't think that he is not paying attention to you but he would be noting down my points. We started off with our introduction. He asked about my projects. Project discussion was for about 10 minutes in which he asked me what was my part in the project and tech-stack which I used. Majorly the interview was focused on situation based questions for example :- How will you react if you have a conflict with your team-mates? Have you helped anyone in any technical aspect? It was as long as technical round. Atlassian gives a lot of weightage to this round, so take this round very seriously. Be prepared with these type of questions beforehand and do not be blank in front of interviewer. Have confidence if yourself and read all the Atlassian values given on their website. Finally, five candidates were selected for the position after completing all the rounds of the interview process.

Important Topics and Subtopics to Remember

Very Important :- DSA,OOPS,DBMS Graphs and DP is very important topics. (Most of the coding round problem are based on them) OS (Very rarely asked)

Sources of Preparation

DSA- Codeforces ,Leetcode ,gfg OOPS DBMS - GFG , Javapoint Graphs & DP (Strivers playlist) For DSA I would say if are able to solve only first 2 problem in a contest on codeforces then I would suggest to switch to leetcode , it will help you cover more topics else on codeforces it will take a lot of time to cover all those important topics like graphs and DP.

Any Additional Comments

Batton Inc. Japan

IT

SDE

Stipend offered:45000

CGPA:8.15

Recruitment Procedure:

Round -1 : Coding round on hirepro It has 30 objective questions and 2 coding questions. Those 30 questions were based on Git. One coding question was on DP of medium difficulty. Second question was on Array of easy to medium difficulty. But we could only code in Python, Typescript or Javascript. Time limit was 1 hour 25 minutes. Round - 2: It was an interview round. The questions ranged from projects to behavioural. Overall the people were friendly.

Important Topics and Subtopics to Remember

OOP and DSA

Sources of Preparation

Striver SDE Sheet for DSA

Any Additional Comments

caterpillar

Mechanical/Design

Engine Performance Analyst

Bangalore

Stipend offered:20000

CGPA:8.23

Recruitment Procedure:

Round 1: Online Test Prepared with formulae cheat sheet online to quickly revise for test, did this on the same day as the test. (I used these <https://engineeringnotes.net/category/uni-engineering/>) Companies depending on the role(can be unclear in job description sometimes) they want to hire for can have varying section questions in test. But its generally English (comprehension skill check), general aptitude (very basic logic based, too easy compared to bitsat), Math (equation formulation and solving check) and lastly core mech questions, this was the largest section by far with around 40 questions, it had questions from almost all CDC taught. Some questions were a bit far fetched and expected one to remember few large DME equations like life of a bearing running at x RPM with y reliability... can ask some theory based questions. One question even asked bearing selection from particular manufacturer, which one can not do without any charts or tables, can easily skip such questions. Round 2 was supposed to be a GD but companies can alter it even on short notice. Round 2: Technical interview (Remember to be confident with your answers) Each of our interviews lasted about 25 mins. There were 2 pairs of employees each interviewing one candidate. Intro-(prepare a list of keywords to speak about for such obvious questions) How to? YouTube. Asked me to choose 2 subjects that I am most comfortable with. For me Applied thermo and heat transfer. Asked if I had done any project related to these subjects. Mentioned about formula team experience, what I worked on in team, softwares used etc. Q1.Draw Rankine cycle with labels, its usage Q2 Different components used in Rankine cycle. Ans. Evaporator, condenser etc. Q3. Why are baffles used in a shell and tube type heat exchanger? Ans. To increase contact time of hot and cold fluid also to increase heat transfer coefficient h.(Knew this because of heat transfer lab) Q4 What is LMTD? Ans. Log mean temperature difference Q5 What is the formula for LMTD? Asked if course on engines was covered, which was going on at that time. Q6 Difference between petrol and diesel engine. Can fuels be interchangeably used? Q7 Draw otto cycle. Missed one point which they asked if I can identify and correct. Was the exhaust stroke line in Pv diagram. Ended asked me if I had any questions. I asked what software they used at caterpillar and what do they use python for, which they told me was an in house software called destiny and that python was mainly used to iterate and automate tedious analysis tasks among other usage. This was supposed to be the last round but again they asked for one more technical round to finalize between 3 candidates.

Round 2: Technical interview Other 2 employees who didn't take my interview before were on the panel. Intro-same as before with more focus on experience this time. Asked about the same project I talked about before, the formula student one, asked for more intricate details like how did you come about finalizing the design what were your selection criteria, how did you test it and validated the results etc. This round was solely focused on EMM course, particularly on design selection. They started with basic questions of engines of both kind petrol and diesel. Asked about terminologies related to engines like turbulence, knocking, brake power, brake specific fuel consumption, different kinds of efficiencies etc. Gave a engine of particular efficiency and asked me what parameters I would change to improve the efficiency along with the effects gained and lost. Answer all the effects that would increase the efficiency but also mention constraint that it would bring about like material might not withstand new high temperatures so new material has to be selected as well. All in all they want to check if you can see and relate effects with all governing factors and take informed decision or not. Ended second interview. TLDR- 1.Be prepared for any changes in selection procedure 2.Prepare a well rounded intro covering basic info, experience other things you feel would help you stand out 3.Be confident while answering, sometimes even interviewer may not know all intricacies hence might get overlooked even if its slightly wrong and also admit it you don't know answer to any question they will ask a different question, 4.Everything helps be it lab, tech clubs or projects 5.Don't answer vaguely without knowing much about it, you can get cross questioned ALL THE BEST!

Important Topics and Subtopics to Remember

Thermodynamics (Basic and Applied), Heat Transfer, Fluid Mechanics, Mechanics of Solids(including advanced MOS), Design of machine elements, Engine Motors and Mobility (was a requirement for this role)

Sources of Preparation

Formulae cheat sheet (for test round), YouTube (for all non technical questions (<https://www.youtube.com/@TheUrbanFight> and few random channels), Slides, Textbook, Notes(during preparation phase)

Any Additional Comments

Get yourself familiar with at least few popular coding languages like MATLAB, python or C. Core mechanical has become more interdisciplinary than before. Knowing software for CAD and analysis like Solidworks, Solid Edge, Riccardo, ANSYS etc. all adds much value to your CV. Also prepare according to job description some companies some have GD and technical round while some have only technical.

Cisco

IT

Software Engineer Intern

Bangalore

Stipend offered:98000

CGPA:8.83

Recruitment Procedure:

[Round 1] This was around an hour long. The interviewer started with some personal questions to get me comfortable. I explained the projects I had shown on my resume which took up almost half the interview. She noticed that I was in the cybersec club and asked me to show one of the CTF questions I had solved. I opened up a Python file and explained how I decrypted the message using it. Only around 10 minutes were left, so she opened up a shared online compiler and asked me to write code to replace a word with another word in a sentence. [Round 2] Again, I just talked about the projects on my resume in extreme detail, which did not leave any time for him to ask any DSA or OOP questions. This again was around an hour long. At the end of every interview, I asked two personal questions to the interviewer about their experience at Cisco and what they like the most. [Round 3] This was an HR round. She merely asked me if I would prefer to work in Bangalore or Chennai and if I was aware of the PS2 lock. It ended in 5 minutes. Final offer was given to 7 people from Goa.

Important Topics and Subtopics to Remember

DSA, OOP

Sources of Preparation

[DSA] First learn theory if you have time using the first three courses of this specialisation: <https://www.coursera.org/specializations/algorithms> Practice at least two medium questions from leetcode everyday, and from cses.fi too if you are targeting a day zero company. Allot 2-3 topics per week to focus on, starting with the easy ones. The weekwise schedule provided by the PU is excellent in this regard. Rule of thumb: Don't do any question with a Like:Dislike ratio less than 2. Never spend more than 30 minutes on any question, no matter how close you think you are to cracking it. [OOP] Cheatsheet provided by PU:

<https://docs.google.com/document/d/1v0gAi12LeFM3OX0IIFfXIHrx6q-cQs1ixGUMmKheXKQ/edit> [DBMS, OS, CN] They won't ask questions on these topics unless you put them on your resume. If you really want to do them, just go through previous chronicles and understand the answers to all related questions asked in their interviews.

Any Additional Comments

Cisco

IT

Software Engineer

Bangalore

Stipend offered:98000

CGPA:6.43

Recruitment Procedure:

Round 0: Coding test: It had 2 Coding questions and some MCQ questions on topics like DSA, OOP, OS, DBMS, networks, and logical reasoning. I solved one problem fully and one partially and got shortlisted for interviews. Round 1: Technical round: The round went on for around 1 hour. The interviewer asked me three standard DSA questions. First was <https://leetcode.com/problems/rotate-array/> Second was <https://leetcode.com/problems/climbing-stairs/> I explained the logic and wrote the running code for both of them. The last one was on LinkedList, similar to <https://leetcode.com/problems/swapping-nodes-in-a-linked-list/> He just asked me to explain the logic, and I didn't have to write the code. It went on for like 30 minutes. Then he asked me if I knew Computer Networks. I told him I briefly read it after being shortlisted for interviews. So, he just asked me a few full forms only. Cisco is a networking company, so knowing computer networks is better. Then he went through my resume and discussed one of the projects. Round 2: Managerial Round The round went on for like 50 minutes but didn't include many technical details, and it was more like a discussion on everything. It started with a discussion of my projects. Then she asked me a puzzle with a long story, whose answer was to do a binary search. Then she gave me a situation-based question to see the ability to think of different possible scenarios. The problem has no correct answer, and you have to say whatever comes to your mind. Round 3: HR round This round was very short, and he mostly asked for details only, like the city preference, plans for further studies, etc. The only question was: What are the competitors of Cisco? I didn't know anything about other networking companies. So first, I said it depends on the product, like for Webex, it is Google, zoom. For networking, I said Cisco is a leader and doesn't have any competitors. Later I admitted I didn't know any names, so he told me some.

Important Topics and Subtopics to Remember

Must Know: DSA Better to know: Computer Networks Rest all depends on the interviewer.

Sources of Preparation

DSA: IT prep sheet given by PU, Leetcode, InterviewBit, GFG Codeforces contest and upsolving OOP: <https://www.geeksforgeeks.org/object-oriented-programming-in-cpp/> OS, DBMS: Love Babbar youtube channel.

Any Additional Comments

Cisco

IT

SDE

Bangalore

Stipend offered:98000

CGPA:8.14

Recruitment Procedure:

Coding Round: 3coding qns plus a few mcqs on Oops/dsa/basic os/basic cn. Round 1: Resume Interview. Round 2: Technical Interview. Some dsa questions and puzzles. Also a few hr qns. Round 3: Hr Interview

Important Topics and Subtopics to Remember

DSA OOP

Sources of Preparation

Coursera,Gfg,Leetcode for dsa Gfg for oop Interview bit for basic CN and OS

Any Additional Comments

Cisco

IT

SDE

Bangalore

Stipend offered:98000

CGPA:8.9

Recruitment Procedure:

ROUND 1: ONLINE ASSESSMENT: This round had computer science fundamentals questions from topics such as DSA, Networks, Computer Architecture, OOP and also 2 coding questions.

A variation of word search <https://leetcode.com/problems/word-search/> A question similar to burst balloons <https://leetcode.com/problems/burst-balloons/> The students who completed at least one question and had good scores in aptitude were selected for round 2

ROUND 2: TECHNICAL INTERVIEW: This round was purely technical, the interviewer was friendly and helpful. It started with a basic introduction, and then asked me questions about my projects such as How did you implement these features?, can you add any new features? Then there were some basic discussions on the time complexity of insertion in a Binary tree, minimum time complexity sorting algorithm, memory management and allocation. Then there was an easy-medium DSA question. The interviewer expects you to run the code on a sample testcase.

ROUND 3: MANAGERIAL INTERVIEW: This round was purely managerial, and the interviewer was very jolly and friendly. It started with the basic discussions on my projects, what troubles you have faced on the projects (not from technical but from managerial point of view), and how did you think about implementing these features. Then the discussion went to what are your hobbies and interests, we had a discussion of 10 mins on that The talk was then about your strengths and weaknesses. ROUND 4: HR ROUND: It was just a 10 min round where the interviewer gave details about the stipend, and whether you are willing to relocate, and do you have any plans for masters etc.

Important Topics and Subtopics to Remember

DSA - graphs and DP mainly, and time complexity OOPS - 4 pillars Proper understanding of the projects

Sources of Preparation

GFG, leetcode, interviewbit

Any Additional Comments

Cisco

IT

SWE

Banglore

Stipend offered:98000

CGPA:7.64

Recruitment Procedure:

Round 0 : Coding Round Test Duration was 1.5 hrs which consisted of 2 Coding Questions and 40 MCQs based on logical reasoning and CS fundamentals. The first coding Question was Identical to <https://leetcode.com/problems/burst-balloons/> and the second question was similar to <https://leetcode.com/problems/word-search-ii/> . I had scored full in the first question and partial in the second question. 34 candidates were shortlisted for the interviews. Round 1 : Both of us introduced ourselves. He went through my resume and asked to explain my MuP Project. The discussion took place for around 5-10 minutes. Then we had a discussion on the following scenario : Given a particular situation of an ongoing chess game, how will I identify the safe positions where I can move my pieces such that the opponent cannot attack my piece in the next move. We discussed the pros and cons of using various approaches and tried to come up with an optimal solution. The interview ended with a lite puzzle : How do I multiply a number with 15 without using the + or * operator. The round lasted for 45 minutes. Around 22 candidates were shortlisted for Round 2 Round 2: The interview began with my introduction. Since I had pursued CP in my second year, we had a short discussion on my CP journey. Then I was asked to talk about my PS Project and a self project I had put on my resume. The round lasted for around 30 mins. All candidates who had appeared for Round 2, appeared for the HR Round as well. Round 3: This was an HR Round which lasted for 10 mins. Basically this was more of an informative round where the interviewer spoke about the work culture at Cisco and asked me my preference order for the office location. I was casually asked whether I have any idea about which companies are competitors of Cisco. 7 Students were awarded with the final offer.

Important Topics and Subtopics to Remember

DSA, OOP and DBMS

Sources of Preparation

Codeforces and other CP Platforms + Leetcode. OOP - GFG Articles + Youtube DBMS - Slides
+ Youtube (Knowledge Gate)

Any Additional Comments

Make sure you are confident while speaking in an interview. Consider working on your communication skills as well. Make sure you know about the projects you have put on your resume in detail. While discussing a DSA question, make sure you are thinking aloud.

Cisco

IT

SDE

Bangalore

Stipend offered:98000

CGPA:7.59

Recruitment Procedure:

Round 0: Coding round In this round we were asked two programming questions and both of them were leetcode hard question. One of the question was exactly same as the "burst the balloons" problem in leetcode. And in the other question we had to make our own comparator (do not remember the question exactly). I did the first question completely and the second question partially. Along with these coding questions there were MCQ's and short answer find of questions as well. These questions were based on C programming, computer networks and general aptitude questions. I must have done 50% of these questions. Round 1: technical interview They started this round with a quick intro, questions on the courses I have done. Then they asked which was my favourite data structure. I answered heaps/priority queues. Then he asked me how is the heap implemented (heapify up and down). Its advantages and where it can be used. Then he asked me about BST's(binary search trees). He asked me the code to identify a valid binary search tree. Then he asked me "Find next greater number" problem. This was the questions that had to implemented using stacks. I was able to answer both the questions. Then he asked if I knew OOPs. I said I haven't taken OOPs course but had prepared for the interview. Then he asked me questions on inheritance, abstraction and polymorphism. In polymorphism he asked me function overriding in detail. I had to explain with an example. He was quite satisfied with my answer and seemed happy. Then he asked if I had any questions for him. I asked if my approach to solve the problems were optimal and what responsibilities I can expect in cisco. He answered the questions in detail, and then the round ended. Round 2: technical/Managerial round Interviewer started this round by asking about my experience from the previous round. Then he asked me to explain my projects. I explained two of my projects in detail and also showed them its implementation. Then he asked me a puzzle question. The question was "We are given 25 horses and are allowed to race only five horses at a time. We do not have watch or timer. I was supposed to find minimum number of races required to find the top three fastest horses in the bunch.". I was not able to give the most optimal answer but they wanted to see my thought process more than the final answer. He asked me think over this question and again he asked if I had questions for him. I asked him one or two questions and then interview ended. Round 3: HR round: This was a pretty easy round. She just asked me if I wanted to go for masters or not. And then she asked if I had any questions for her. She asked

me about my interview experience. This was a short 10 min round, nothing technical. The overall experience was very good. The process was very smooth. Results were announced by the end of the day.

Important Topics and Subtopics to Remember

Data structures and algorithms, OOPs and your projects

Sources of Preparation

SIP prep material given by college. This is very good material. It has questions from leetcode , interviewbit and gfg. It also has material for other computer science course like computer networks, OS and OOPs.

Any Additional Comments

Nothing much. Just should know your strengths and weaknesses.

CRED

Non Core

Risk Analyst

Bangalore

Stipend offered:60000

CGPA:8.01

Recruitment Procedure:

1) - SQL Round - 6 questions of varying difficulty 2) - Analytical - Math and Logical Reasoning
3) - Written Case Round - Reasons why a distributor might be selling coconut oil at a lower price 4) - In person Case study round - Detailed discussion and case solving for setting up a business similar to Uber - a cab aggregator app, solving for profitability, different scenarios regarding surges in demand, business expansions etc. 5) - Hiring Manager round, basically this was taken by our team lead here in CRED. It is an assessment whether you would fit into the CRED values or not.

Important Topics and Subtopics to Remember

SQL (DBMS for CS students) - helps really in the process as well as on the job. Analytical skills / common sense - helps with life Case Studies

Sources of Preparation

SQL - all the course material for DBMS course are more than sufficient. Case Studies - IIM-B case study handbook - look for simple cases of guesstimates and profitability, best way to go through this is with a group of interested friends. HM - Be as frank and honest as possible, a lot of the life at CRED depends on your and the company's values. Try not to be oversmart or lie about anything, a strong motivation for the role is also gauged.

Any Additional Comments

DevRev.ai

IT

SDE

Bangalore

Stipend offered:100000

CGPA:9.77

Recruitment Procedure:

Round 1: Technical Interview The interviewer was very friendly and we had a quick and fun introductory session. Complete language flexibility was provided and we started off with a warm-up question where we reversed the order of words in a string. There were 2 questions after that, the classic jump game problem and finding the Nth Fibonacci number. There was no silence during the process and the interviewer always lightened the mood with small talk. Round 2: Technical + HR Core CS concepts were covered this time along with 1 DSA question. The question was to construct a binary search tree from scratch given a list of integers and to write a helper function that calculates the height of the tree. Questions on access specifiers were also asked. The interviewer, being a database specialist, then asked for a detailed briefing about indexing and wanted me to mention the various data structures used. I was also asked bonus questions on Docker, Kubernetes and basic web development. The interview ended with a small culture session where both of us shared some personal experiences and expectations. Overall it was a very chill process, quite informal and enjoyable.

Important Topics and Subtopics to Remember

Must know: DBMS Bonus: Web-dev

Sources of Preparation

InterviewBit: DSA (Very organised and beginner friendly) OOPS and DBMS: GFG and JavaPoint

Any Additional Comments



ExxonMobil

Mechanical/Design

Market analyst and research

Mumbai

Stipend offered:35000

CGPA:7.33

Recruitment Procedure:

First round involved a basic aptitude round where very simple MAT questions were asked. Most of the participants made it into the second round. The second round was a Group discussion round, where groups were formed of around 7-9 people and a topic was given with a few minutes to prepare and then to discuss with everyone. The key is to wait your turn and to make your point count, and maybe successfully and within the bounds of the discussion, refute someone else's point politely. After this round, we were informed of those who were selected for the final interview round. Interviewers were very cordial and welcoming. They didn't put undue pressure on us, but made sure we answered properly. 2 pretty simple technical questions were asked, related to basic mechanics and basic Chemistry, given those two are my degrees. Beyond this, most of the interview questions were based on your CV and to see what your level of clarity and understanding is with regard to what you have filled in your CV. The recruitment process was done with this, and they recruited 2 people from the Goa campus.

Important Topics and Subtopics to Remember

Basic math, logical reasoning

Sources of Preparation

Basic maths and logical reasoning

Any Additional Comments

Exxon Mobil

Chemical

Will be informed later

Bangalore

Stipend offered:35000

CGPA:8.29

Recruitment Procedure:

Round 1: Online Test The test consisted 3 sections, first being English, followed by Logical Reasoning, and finally a Quantitative Aptitude section. It was pretty easy except a few puzzle-based questions in Logical Reasoning. The Aptitude section mostly consisted of problems utilising upto 10th Grade Mathematics. The key differentiating factor was definitely solving as many questions as possible within the given time bounds. I would suggest to try and attempt all the questions from the English section as they were the simplest ones in the test and were scoring ones as well. Yes there was no technical section in the online test . Round 2: Pre-Placement Talk and Group Discussion 13 students were selected from Goa campus for Round 2. A Pre-Placement Talk was organised by the company in the morning where a brief overview of the company, various job roles and profiles were explained followed by which, we were divided into 3 groups of around 10 folks in each group, which had people from all over three campuses. The group discussion was held group-wise on a Zoom call. Impromptu topic was given and a 2-minute time was given to think on the topic. There were 3 company representatives to facilitate the Group Discussion. The topic given to me was, "Inflation: Boon or Bane for a country?" . I would suggest, if possible, go ahead and speak up first and break the ice if other folks are silent to score some brownie points .Also, I would suggest not to try to speak everytime and interrupt others all the time. Make sure your words are to the point, crisp, and meaningful. At the end you will be told to summarize the topic in around 1 min, try to cover all the points and give a good end. The topics given to other two groups were, "Is AI taking away jobs?" and, "How are OTTs affecting the cinema industry?". Round 3: Personal Interview Shortly after the Group Discussion round, the list of shortlisted candidates was declared and we were called for the interview round. The interview mostly revolved around my resume. Make sure you are thorough about every aspect of your resume because in my case, they almost asked all the points in my resume. Following this, I had to answer some technical questions which was majorly on Fluid Mechanics, and Thermodynamics. They asked me the use of these subjects with respect to my PS-1 project. Finally, I was asked some HR questions which included some questions about my POR followed by generic HR questions. They also asked me if I have any questions for them, so I would suggest you go through some details about the company so that you don't stay silent and ask them some questions about their future strategies and its implementation. Do not panic in

the interview because it was the most easiest of all the rounds as the interviewers were very friendly and chill. The interview lasted for around 40 mins and then the results were declared on the same day during the evening. Only I was selected from Goa campus.

Important Topics and Subtopics to Remember

Second Year CDC are very important majorly thermodynamics, heat transfer, separation process and fluid dynamics.

Sources of Preparation

Class notes will be very useful, apart from that slides and textbook will do as well.

Any Additional Comments

Google Hardware

Electronics

Silicon Engineer

Bangalore

Stipend offered:125000

CGPA:8.14

Recruitment Procedure:

Round 1: written round : Questions were asked from various topics such as Digital design, Microprocessors, Computer Architecture, CMOS logic gates, Static Timing analysis. Some questions were also asked on Programming as well , you need to know basic algorithms such as sorting binary search etc. Also questions on Performance monitoring such as soak testing and spike testing were also asked. Basic Questions on OPAMP and MOSFET were asked as well. Verilog questions were also asked. Round 2: Technical interview-1 : First they asked me to explain all the projects on my resume which were my MUP project and PS-1 project. After that they started with basic questions on digital design such as solving a 5 variable K-Map, what are Hazards, why is asynchronous reset used etc. Then they asked me to solve a RC circuit Transient analysis question. After that they asked me about Johnson counter and told me to implement it using Verilog. Lastly they asked me to make logic Gates from Mux. Round 3: Technical interview-2 : They started with some standard 2 Flip flop STA questions , how to avoid setup/hold violation etc. Then they asked my to implement a 4 bit up counter in verilog which can take in user input as well like normally it would count from 0 but if user gives an input it should start counting from there. After that they asked me an FSM based question which was not direct, it was kind of like the traffic light road crossing problem. You have to think a little bit in these kind of questions. You can ask for hints as well. Keep the interview interactive. There were only two technical interview rounds and no HR round.

Important Topics and Subtopics to Remember

Digital Design, Verilog, CMOS logic gates, Static Timing Analysis, Computer Architecture - pipelining , cache, basics of RC circuits, basic electronic devices-Mosfet ,Moscap etc.

Sources of Preparation

DD-Marris Mano, class notes STA- VLSI expert CMOS logic gates -Neil H.E west textbook
Verilog-NPTEL/Morris Mano RC circuits-Chembian sir's Youtube channel Electronic devices-
Class notes/ Streetman textbook

Any Additional Comments

Although they didn't ask me any coding questions but they could ask questions on basic programming algorithms such as bit manipulation, binary search, sorting etc.

IBM

Data Science/ AI

Research Role

Bangalore

Stipend offered:50000

CGPA:9.66

Recruitment Procedure:

Round 1: Resume Shortlisting Round 2: Technical Interview: I was asked initially if I had background in NLP. I conveyed that I didn't have much exposure in the area. So they started with DSA. I was asked 2 questions: Q1: It was the Minimum Path Effort from Leetcode. The question was formulated in a different way with roads and junctions. Therefore I couldn't understand the correlation initially. I had given my views on possibility of using DFS and brute forcing. They eventually guided me on the exact method to be used. Q2: It was the Majority Element question from Leetcode. It was asked in the exact manner. Initially I mentioned the standard approach of storing every elements' count in a map and finding the one which occurs more than half times. Then they asked me if I could space optimise it. I had given that approach as well. Thus my final solution was $O(n)$ Time and $O(1)$ space. There was no need to code them as I only had to tell my approaches. After this they queried me on DBMS. They asked some standard questions on Relational Databases, etc. There were no questions on SQL. I don't recall them asking OOPS. Then we had a talk of about 10-15 mins on one of my SOPs in college which was related to Compiler Construction. They seemed to be interested in knowing more about it. Then they told they would ask some basics of NLP and wanted to know how I handled it. I answered it in the best way I could and they seemed to be happy with it.

Important Topics and Subtopics to Remember

1. DSA 2. DBMS 3. Projects

Sources of Preparation

1. Leetcode(DSA) 2. InterviewBit(DSA & CDCs) 3. GFG(CDCs)

Any Additional Comments

Intuit

IT

SDE Intern

Bangalore

Stipend offered:80000

CGPA:8.49

Recruitment Procedure:

Round 0: Coding Round - Intuit had one of the toughest coding rounds amongst companies. It had 4 questions - 1 easy, 1 medium and 2 hard questions. Around 15 students were shortlisted for the interviews. There were 2 technical interviews. Round 1: Technical interview 1 - Duration: 45 minutes. It was a DSA round entirely. The interviewer asked a question on graphs and trees. I was able to answer the question, so he started twisting and complicating the question further. There were 4 variations of the question that were asked, and I was able to answer all 4. The last variation involved a bit of understanding of dp on trees as well. Round 2: Technical interview 2 - Duration: 1 h 15 minutes This round started with resume and project discussion. More than 30 minutes were spent discussing my PS-1 project and one of my personal projects. This was followed by 15 minutes of questions on CS fundamentals including OOP and DBMS, and the last 25 minutes were spent on DSA. The DSA questions asked in this round were pretty simple and straightforward and were based on basic observations and data structures. We had offline interviews and 4 people received the offers on the same day of the interviews.

Important Topics and Subtopics to Remember

Dsa - more on the competitive programming side than Leetcode, OOPS, DBMS

Sources of Preparation

Codeforces, Leetcode - DSA Coding Ninjas, GFG - OOP GFG - DBMS

Any Additional Comments

Make sure you are well aware of the stuff present in your resume, a lot of discussions happen

on stuff you put in your resume. For Non-CS people: Do not hesitate to inform them if you are not very confident in CS Fundamentals because you are from a Non-CS Background, they will consider it. However, being clear with DSA Fundamentals is a must for all rounds.

Intuit

IT

SDE

Bengaluru

Stipend offered:80000

CGPA:8.28

Recruitment Procedure:

Round 1: Coding round The coding questions were doable, not very easy, but I could solve 1 question fully, and 2 more partially of 3. The most important thing in this part is to make sure to attempt the questions even if you can't find the most efficient solution. There are usually partial marks for the number of testcases passed and even a brute force solution will fetch you some marks. Every bit helps. Round 2: Technical Interview There were 12 students selected for the first round of technical interviews. In the first round, I was first asked about some basic information about myself, and some general small talk. The interviewer was very nice, and helped me feel comfortable. He then asked me some coding related questions. The main part was that there is a continuous stream of digits. We want to create a program that keeps track of the most recent 3 distinct numbers, in order of their appearance. The first solution I had to this was a queue of length 3. But there is a problem with this if a number repeats, there isn't a way to add items to the head of a queue. Instead the answer is a linked list with 3 nodes. If there is an input such as 1213, then the linked list should have 123, not 121 or 213. Some other questions asked were about general c++ related stuff, such as the difference between ordered and unordered map, and which one should be used in a given situation. He also asked me to explain what each line does in a simple c++ hello world program. I got stuck with the namespace part, because I wasn't sure of what exactly it does, but otherwise it was ok. Round 3: Technical Interview There were 6 students selected for this round of technical interviews. This time, there were 2 interviewers for each student. The first part of this interview was about project discussion. I was asked to choose any 1 project that I was confident in, and we had a lengthy discussion about it, what challenges I faced, how I overcame them, what I learnt from the project, etc. The second part was about some general DBMS questions. I couldn't answer them very well, and I had forgotten about a lot of the SQL. I was also asked a couple of logic questions, like if you count the fingers of 1 of your hand, without counting the ends twice, and going back and forth, what finger will you be on at 100, and which direction would you be going. After this, 4 people were selected for summer internships. Intuit was the first company that had on campus interviews on September 5th, right after the summer vacation came to an end on 30th August, so I didn't really know what to expect. On the day of the interviews, the students were called to the placement office, and we met all of the team that was going to interview us,

including a BITS Goa alumni. They were fun and did their best to make us relax. After that, interviewees were called into different rooms in the placement office, in 2 batches of 6 each. They gave us some time after the first round of interviews to have lunch, and then told us who would be going through to the second round. For the second round, 5 of the 6 went to do the interviews first while I had to wait for one of them to be done before I could proceed. This period was the most nerve-racking of all this to be honest, I mostly just put my head down on the table and tried to get some rest while I waited. After the second round, the 6 students were called to the meeting room again, and told who was being selected. They also gave the selected students some company T-shirts, and later, some water bottles and stuff. The intuit team told us to wear whatever we were comfortable with, but that doesn't really feel ok when you are so nervous and trying to make a good impression. Honestly, I think the team wouldn't have minded us wearing jeans or a top, but it is always safer to wear something more formal. It is too hot to wear a coat, and that level of formality is usually not required for SIPs, but you should have a couple of formal shirts and trousers handy for the interviews. I am currently in the middle of my internship with Intuit, so I can add some stuff related to the actual internship rather than the recruitment process. First of all, the benefits they provided us, other than the 80,000 per month, was a 1 month stay at a hotel for free, 2 way flight tickets and free meals at the office. At the start of the internship, we were given an orientation, provided with a laptop and were helped to set them up. Everyone was nice and informal at the office. There wasn't any sir or ma'am, we were expected to call them by their names. All the interns were divided and assigned to different teams, under different managers. Other than that, we had the support of a buddy, for general question about Intuit, and a mentor, for any technical problems we encountered. I was always able to get help when needed, and could interact with the team. The code that I wrote is actually going into production, and these features will be used by customers. It is a very fulfilling internship. All the best!!!

Important Topics and Subtopics to Remember

Main topic would be DSA, and some basic knowledge about DBMS. It would be preferable to understand the basics of what each part of the code does, depending on your preferred language.

Sources of Preparation

I mainly practiced using Leetcode questions and used GeeksForGeeks, W3Schools, and TutorialsPoint for reference when I couldn't understand something. Out of these 3, GFG is best. GFG also has these lists of practice questions topic wise that you can attempt.

Any Additional Comments

The main thing is to not panic. Keep calm, even if you think the interview is going horribly, just keep calm and answer what you know. Don't try to make something up or give vague answers if you don't know something, just say "I don't know".

Intuit

IT

SDE Intern

Bangalore

Stipend offered:80000

CGPA:8.13

Recruitment Procedure:

Round 1: Coding Round Round 2: Interview I was asked basic questions about C++ because I said that's the language I use to code. Asked the difference between ordered and unordered map and the difference in time and space complexity while using them. After this there was a DSA question on dp with trees. I was able to think of a solution and was asked to code it which I did. Round 3: Interview I was asked some basic dp questions which I was able to solve quickly. They told me to write some pseudocode as well which I did pretty fast. After this they asked me DBMS questions regarding designing a database for an organisation. I don't remember exact details but they were making sure I have good knowledge of normal forms and database design.

Important Topics and Subtopics to Remember

DBMS, OOP, Language basics (whichever you choose)

Sources of Preparation

Leetcode

Any Additional Comments

Jaguar Land Rover

IT

Software Intern

Bangalore

Stipend offered:80000

CGPA:9.37

Recruitment Procedure:

Round 0: Written Test The written test consisted of two sections with about an hour to attempt each. The first section had logic based multiple choice questions with negative marking. These questions were the same for electrical and mechanical domains as well. The second section had three medium level coding questions. Round 1: Interview (Technical + HR) There was only one interview round which lasted for about an hour. It was conducted by a panel of three interviewers. The asked in-depth questions related to the projects that I had mentioned in my resume. I was then asked a counting sort question which I had to code. This was followed by questions regarding the time complexities of different sorting as well as some other algorithms. I was also asked basic OOP questions and a question related to how I would implement data transfer which involved the use of queues. After this they proceeded to the HR round. They asked me what I knew about the company and why I wanted to join Jaguar Land Rover. They also asked me what I thought made a car a luxury car. After this I had time to ask them questions.

Important Topics and Subtopics to Remember

DSA, OOP

Sources of Preparation

Leetcode and InterviewBit for DSA, GFG for OOP

Any Additional Comments

Know what the company does and prepare an answer regarding why you find it interesting.

Look up their website to know the projects undertaken by them

Jaguar Land Rover

EV Powertrain

Data Analytics

Bangalore

Stipend offered:80000

CGPA:7.43

Recruitment Procedure:

Round 1: Written Test The test was held online and was remotely proctored. There were 3 sections: 1) Aptitude: All the questions were MCQ type of questions. These questions were designed to test the logical thinking or problem solving capability of the students. 2) Technical: All questions were of MCQ type. These questions were mostly based on the concepts from Electrical Machines, Control Systems, SAS, DD and some were of Power Electronics. Note: For section 1 and 2 the level of difficulty of the next question was dependent on whether we give the correct answer or not for the present question. For e.g. if I answer a question correctly the next question would be of slightly higher difficulty, whereas if I answer a question incorrectly then the next question would be of a lower difficulty. 3) Coding: This section had only 2 questions which required to submit the code. One question was pretty easy whereas the other one was a bit difficult one. Round 2: Interview The interview started with my brief introduction. Then they were quite interested in discussing about some of the projects I mentioned on my resume. This discussion went for almost 15-20 min. Then they asked me which subject I am confident about and since my answer was digital design, they asked some questions relevant to it. Mostly these questions were to test my basic understanding of the subject. In between they also asked me about the maximum power transfer theorem and Thevenin's theorem as well. Apart from this since I had mentioned Verilog in my resume, they asked me to make a simple timer in Verilog. Also asked difference between blocking and non-blocking statements. After this they diverted the interview towards some electric vehicle specific questions. These questions were based on different subsystems of an EV, how can I make an EV charger, etc. They did ask me to name some of their cars, the CEO of JLR, etc. At last they asked some HR specific questions like would I like to go for masters and where do I see myself in the next 5 years. Finally they asked if I had any questions. I did ask about the work culture and what type of project I would be working on if I get selected □. That's all!

Important Topics and Subtopics to Remember

Mosltly Electrical Machines, Control Systems, Signals and Systems, Digital Design. Do revise

some of the ES topics like RC circuits, half wave rectifier, full way rectifier. Better to have some basic understanding about Power Electronics.

Sources of Preparation

For the cdcs I have mentioned class notes is what I would prefer.

Any Additional Comments

JSW Group

Non Core

Marketing intern

Mumbai

Stipend offered:80000

CGPA:7.86

Recruitment Procedure:

Round 1: Resume shortlisting Most candidates successfully made it through this round. The primary factor in this round was the cgpa cut off established by the organization Round 2: Test The test comprised of english, logical reasoning, basic math and core engineering. The core engineering part was different for the various branches and comprised of general formulae from the core topics. The english, math and logic parts were on the simpler side with time being the most important factor in the process. Round 3: Group Discussion In this round, a senior HR representative of the company presides over two rounds of GD. The lot of applying candidates are divided into groups and are then given the topic along with 2 mins to prepare. The two topics discussed was the developments in the paint industry and the Tata takeover of Air India. The GD groups are filled with very eager candidates and often expressing your point of view requires more than just good ideas. In our year, the rounds were online making the GD a bit harder to contribute in, especially as they were timed at 10 mins. Round 4: HR Interview The HR interview was taken by two HR employees of JSW group. There were two panels and each candidate was assigned a panel. They asked questions about the JSW group and about the candidate. We were asked about our strengths and weaknesses and asked about weak points in our resume. As long as you can explain their queries to them in a cool and composed manner this round is easy to get through.

Important Topics and Subtopics to Remember

Heat transfer, Thermodynamics, Fluid mechanics, Mass transfer

Sources of Preparation

Referring to text books recommended for the courses along with formula books for the same



Any Additional Comment

JSW

Mechanical/Design

Engineering Intern

Mumbai

Stipend offered:40000

CGPA:7.76

Recruitment Procedure:

Round 1: Resume Shortlisting In this round, eligible profiles are shortlisted for the aptitude test. Usually, there aren't many eliminations at this stage, although your CV may be evaluated in the Technical interview/ HR round. Highlighting your past internship experiences and any PORs held helps in directing the attention of HRs toward your skillsets and could help you stand out from the rest of the applicants. In my experience, I tried to form a narrative surrounding the things I've learned from internship experiences (generally PS1), my personality, and my ambitions and reflected on how industry experience would be the next logical step in my career path. Round 2: Aptitude test The aptitude test is divided into 4 sections of equal weightage- 1) English 2) Mental Ability 3) Basic mathematics and 4) Mechanical engineering. The first three sections are pretty standardized and involve comprehension, synonyms & antonyms, ratio & proportions, LCM HCF, patterns etc. The final section is your core competency (in my case mechanical engineering). All questions are MCQ based and you can only start one section after submitting the previous one. There are 20 questions in each section and 20 minutes are provided to finish them. Hence the emphasis here is on both speed and accuracy. Round 3: Group Discussion The group discussion round consists of 2 topics of 15 minutes each and these are topics that are relevant to industries, the economy and the environment. The topics provided to us were 1) TATA's takeover of Air India and 2) The paint industry in India. A critical part of any GD is to control the flow of the debate. Taking control and directing the conversation helps in keeping you equipped with discussion points and make you the leader of the group. Similar to the resume shortlisting round, I feel that the performance in the GD round was taken into account in the final shortlists as well. Round 4: HR/ Technical interview Although the hiring process mentions this as a technical interview, it was primarily an HR round with basic (and sometimes even weird) questions. A pretty standard question revolving your future plans and prospects will crop up along with a follow up regarding what you expect to gain out of the JSW internship. The key here is to remain confident, elaborate smartly on answers and again form a narrative to explain why JSW is the right place for you.

Important Topics and Subtopics to Remember

Fluid Mechanics Applied Thermodynamics Manufacturing Management Material Science Solid mechanics

Sources of Preparation

Class Slides, Prescribed textbooks and reference books (handout), free GATE preparation videos on youtube

Any Additional Comments

A general idea of the industry and the Indian economy

JSW Group

Mechanical/Design

Sales and Marketing

Mumbai

Stipend offered:80000

CGPA:9.36

Recruitment Procedure:

Round 1: Aptitude Test. The duration of the test was about 90 minutes. It had 4 sections: English, Quant, Logical Reasoning, and core Mechanical Questions. In English, mostly there were Reading comprehension type questions. The passages were not tough and easy to comprehend. In quant, the questions were up to 10th class level. Mostly for this section, questions from IndiaBIX can be practiced. For Logical reasoning type questions, most questions were from syllogism and deductive reasoning. For this section also, different types of questions can be practiced from IndiaBIX itself. Finally, for the core section, there were questions from Mechanics of Solids, Thermodynamics, Fluid Mechanics, and Material Science and Engineering. Someone word questions from the Iron-Carbon diagram were also there. Round 2: Group Discussion The group discussion had two topics. Firstly we were given a topic about the Paint Industries-its impact and potential in the industry. After this, we had some time to prepare and then the discussion started. The discussion lasted for about 7-10 minutes. After this, we were given the second topic, which was about the takeover of Air India by the TATA group. For the mechanical students, mostly everyone had cleared the group discussion round as well. Round 3: HR Interview This round just lasted for about 7-10 minutes. Initially, I was asked to introduce myself. Then I was asked to talk about a situation where I had won because of teamwork. After this, the interviewer asked me if I had any questions.

Important Topics and Subtopics to Remember

Fluid Mechanics, Material Science and Engineering, Thermodynamics, IC Engines, Mechanics of Solids.

Sources of Preparation

For Core topics, only the class notes/slides can be followed. For Quant and logical reasoning,

you can practice different types of questions from IndiaBIX website. For understanding important topics from logical reasoning like syllogism, you can also watch videos on Youtube.

Any Additional Comments

JSW

Chemical

Core engineer

Dolvi

Stipend offered:80000

CGPA:8.47

Recruitment Procedure:

Round 1: Online Test Round 2: Group Discussion Round 3: Interview

Important Topics and Subtopics to Remember

Heat transfer, Separation Process 1, Thermodynamics, Projects in your CV

Sources of Preparation

Slides

Any Additional Comments

JSW Steel Private Limited

Mechanical/Design

Operations Engineer

Mumbai

Stipend offered:40000

CGPA:8.35

Recruitment Procedure:

Round 0: Online test: It had questions specific to the core subject of your branch. For the electronics students, as in my case, the questions covered most of the subjects that were taught in the second year. The questions were based on control systems, electrical machines, digital design, microelectronic circuits, and electronics devices. The questions were multiple-choice type, and most of them were of easy-medium difficulty. There was also a separate aptitude section in the test. Round 1: Group Discussion It was a round to test our communication and verbal skills. If you started off or concluded the discussion with valid points, then that earns bonus points. Mentioning and putting forward only relevant and valid points is advisable. I would not advise to cut someone off in between their speeches; rather, wait for your turn to speak. Round 2: Interview It was more of a HR kind of interview. Value-based questions were mostly asked. My interviewer also asked about one of my projects, but he didn't dwell much on it and was satisfied with just the overview I gave him .

Important Topics and Subtopics to Remember

If from the electronics branches, focus on the core subjects taught in the second year. These include digital design, electrical machines, control systems, SAS, ED, and MUE.

Sources of Preparation

For the online tests, most of the questions were easy to medium level so the basic coursework that is taught to us should be enough

Any Additional Comments



Microsoft

IT

SWE Intern

Hyderabad/Bengaluru/Noida (on-site)

Stipend offered:125000

CGPA:9.09

Recruitment Procedure:

I was selected through Microsoft's Engage Internship Programme, 2022. Round - 0a & 0b These rounds were conducted in the second half of April for the selection into the Engage Mentorship Programme. The questions were conceptual, focusing on the theory of DSA (Data Structures and Algorithms). They covered topics such as the implementation of different data structures, their time and space complexities, and how we could modify the performance of a data structure to meet specific requirements. Engage Mentorship Program - May (4 weeks) We were assigned a mentor from Microsoft, and we had weekly meetings. Our project was to build an application that utilizes facial recognition technology. We had to make the app from scratch in 4 weeks. This required knowledge of Android Development (Web Development), APIs, and Cloud Infrastructures like Azure/AWS. In the end, we had to submit our GitHub repository, along with a video demo of 4 minutes explaining how we used Agile Methodology while building our project and what extra features I have added. In the end, we were scored based on code quality, the UI/UX, and feedback from mentors. Based on this, some people got a Direct Internship offer, some had 1 round of AA (As - Appropriate) round, and others had two rounds. I had my AA round. The interviewer was an Engineering Manager with 20+ years of experience. The interview lasted for 1 hour and was conducted on Microsoft Teams. I gave my introduction and how my overall experience had been in Engage. I also briefly explained my project, which led to a discussion of how the code is compiled by Flutter and how different it is from native Android or Swift development. We discussed my approach to the project and questioned a few design choices made by me. Then, we had a discussion about the latest developments in Windows 11 and what was his role in the newest release. This discussion was brought to light because I mentioned being a part of the developer's preview for Windows 11. In the end, he asked if I had any questions for him. I asked him a few questions, and the interview concluded.

Important Topics and Subtopics to Remember

System Design, In-depth knowledge of the project and technologies used (in resume), DSA and OOP was also asked in some interviews/

Sources of Preparation

For DSA, the GFG course covers most concepts. For Practice, I solved questions from Blind 75/NeetCode 150. Question related to Projects - Tech Documentation is your best friend. System Design/OOPs - Geeksforgeeks site, practise as many questions as possible.

Any Additional Comments

For Microsoft Engage, the project was related to Full-stack or Android development with knowledge of Cloud Infrastructures like Azure or AWS, hence prior experience and knowledge was beneficial.

Microsoft

IT

SWE

Bangalore

Stipend offered:125000

CGPA:7.9

Recruitment Procedure:

Round 1: AA round (Microsoft specific version of a tech + HR hybrid) The interview was 1 hour long. It was mostly a discussion on several topics ranging from computer science fundamentals to my projects. Since I got this opportunity through Engage, Microsoft's off-campus hiring program, I had built a project which was the center of discussion. The interviewer dove into the high-level understanding as well the implementation of the application that I had built. He also asked stuff like Distributed Systems, Networking, and REST API. He just wanted to know if I was familiar with the stuff. Having worked in the web space, I was able to answer all the questions. Then followed the typical HR questions like: "Why Microsoft?"; "What aspects of the company do you think stand out?"; and a few others. Lastly, the interviewer asked if I had any questions for him. I asked 2-3 good questions after which we ended the interview. It was a pretty good experience. The technical stuff wasn't too deep and the interviewer was not bent on grilling me. We had a meaningful discussion on real-life applications. The project that I had built was inefficient in some aspects. The interviewer was shrewd enough to point those out and he had made into a question asking how I would optimise the whole thing. That right there is a solid industry-level question.

Important Topics and Subtopics to Remember

DSA, OOP, DBMS, CN, OS; Apart from that, knowledge of REST API, Cloud computing and a little bit of System Designing would definitely help.

Sources of Preparation

Gfg, InterviewBit, SDE sheet, class notes for topics other than DSA

Any Additional Comments

1) Communication: A lot of people are good at thinking and implementing complex stuff, but aren't so good at communicating the idea; Being able to articulate your points is a valuable skill
2) Drive the convo: If your interviewer is not hell-bent on grilling you, chances are, they would let you drive the interview. Make sure to fully express your strengths and not let them get hints of your weaknesses.
3) Ask solid reasonable questions at the end of the interview. It would make a good impression and you would definitely come across as someone who is curious about the interviewer as well as the company.
4) Make sure whatever you put in your resume you have total knowledge of. A lot of times interviewers dig deep into stuff mentioned in the resume. That counts as technical stuff. They could ask you about the tech stack and project details. Even if you've copied your projects, just make sure you know the details. Also, when asked to explain a project or anything from your resume, try to give a high-level understanding. Don't dive into details. That'll give your interviewer more areas to question, and perhaps, grill you.
5) Just be confident; Either you know the answers or you don't; Just try to answer whatever you can, and be straightforward if you don't know something; talking total gibberish is not always a good idea

Microsoft

IT

SDE Intern

Hyderabad

Stipend offered:125000

CGPA:8.49

Recruitment Procedure:

Round 1: Coding Round - Two coding questions on Codility platform. I don't remember the exact questions, but one was based on arrays and the other was a greedy problem. 8 people were shortlisted. There was definitely a CG cutoff for getting shortlisted. Round 2: Technical Interview - The interviewer was a senior software engineer and asked me to introduce myself. He proceeded to ask me a question on printing the boundary traversal of a tree and printing the minimum of a rotated sorted array, which I did using binary search. - He then asked me about the difference between BFS and DFS. I explained the algorithms and the data structures used (queue for BFS and recursion for DFS, although we can simulate it using a stack), and in which scenarios BFS is preferred over DFS (like shortest distance between nodes for BFS since it gives you the immediate neighbours). - Then he asked me if I had any questions for him, (and although it's not recommended to ask this) I asked him for feedback on the round. He said he was happy with my performance. Round 3: Technical + HR interview - This round was taken by a very senior manager. He asked me about myself, what role I would like to work in. He went on to give a problem statement about designing a data structure for adding and storing infinitely long numbers. He gave an example of numbers coming in the form of a bytestream or through a text file taken as input. I discussed the limitations of the standard data types available, and proposed storing individual digits in a linked list or a stack as a solution. - I suggested these over vectors as insertion in vector takes $O(n)$ time, although random access of elements is $O(1)$. However, we don't need to access digits randomly, we need to access them linearly for addition and then add a new node if there's a carry over on the last digit and a new one needs to be added. For this, since insertion takes $O(1)$ in a linked list I thought it was more suitable. He asked me to code up addition of two numbers represented by linked lists. I did it and he said that my code does pass test cases, but are there any situations where it would fail? - I mentioned that I was dynamically allocating memory on the heap for each individual linked list node using new keyword. But I wasn't taking care of the deletion. That could cause memory leaks and lead to fragmentation. He seemed happy with my answer and asked what happens if the heap is fragmented and you try to allocate memory. I couldn't answer this and he said the statement returns a -1. - He still went on to ask me about my PS-1 project and a course project on ML, which I described in detail and gave the precision, recall and F1 score achieved by me.

He asked me if I had any questions for him, so I remembered some questions to ask the interviewer that I had read on Reddit - were interns allowed to push to production? How do interns get used to the huge codebase of Microsoft within 2 months? He answered them in detail. Rest of the interview was more like a chitchat about my future goals in the software engineering field. I mentioned what I would like to learn and work on in the future. He ended the interview by saying he was looking forward to seeing me as an intern in Microsoft.

Important Topics and Subtopics to Remember

I wasn't asked any core CS topics except DSA (some parts of OS only because I brought it up but I hadn't done it yet back then). But they're good to know as the interviewer expects your CS concepts to be clear.

Sources of Preparation

Mainly Leetcode. Also Hackerrank (for story type questions as asked in coding tests) and Interviewbit (for timing myself). GFG and youtube for CS topics

Any Additional Comments

Just show yourself as passionate about tech and working in tech.

Microsoft IT

SWE

Bangalore

Stipend offered:125000

CGPA:8.88

Recruitment Procedure:

MS Engage program

Important Topics and Subtopics to Remember

Project-submission based selection with initial rounds covering resume shortlist, probability and statistics, discrete mathematics, DSA quiz based questions

Sources of Preparation

Courses

Any Additional Comments

Do the tests in human-like time. Read the questions and then answer in your own words. Do it as quick as possible from your own end.

Moveworks.ai

IT

Software Engineer Intern

Bangalore

Stipend offered:75000

CGPA:8.46

Recruitment Procedure:

Coding round: Two coding questions Difficulty level: (Easy to medium) Speed is important.
Round 1: Technical Interview: This round I was asked to solve a DSA question which was of the level of leetcode hard. Here is the link for the similar question from leetcode.
<https://leetcode.com/problems/word-break-ii/> Even though I was not able to give the optimal solution, the interviewer was happy with the approach. Two students were shortlisted after this round. The interviewer was very helpful during the round. You will also be evaluated on the quality of code and explanations. Round 2: HR interview: Even though it was a HR interview, It was taken by an Engineering manager. He was interested in knowing what projects I did. You have to be confident about your projects. Two of us got the offer after this round

Important Topics and Subtopics to Remember

Data Structures and Algorithms Object Oriented Programming

Sources of Preparation

Leetcode. PU SIP practice sheets

Any Additional Comments

Palo Alto Networks

IT

Intern

Bengaluru

Stipend offered:100000

CGPA:7.78

Recruitment Procedure:

Round 0: Online Assessment: It had 2 coding questions and a lot of MCQ questions. The MCQ questions were on CS fundamentals - OOP, DSA, DBMS and on logical reasoning. Accuracy and speed is important to score in these questions as time was limited. The 2 coding questions were of moderate difficulty, one of them could be solved using Hash Maps. To get selected for Interview, both the coding questions had to be correct along with a good score in MCQs. Round 1: Technical Interview The Interviewer was polite and asked me to introduce myself. I mentioned about my degree, the course I have done, and my interests. She was curious to know about the courses I had done for Data Science Minor program and I also mentioned that I have done projects in the field. Then we talked briefly about the projects I did at my PS1 station and other self projects. After this she quickly went to the coding question. DSA Question: It was a standard question on Linked List where I was asked to detect cycle in a Linked List when the pointer to the first node is given. I explained the logic and was asked to code it simultaneously. Then I was asked about some standard OOP questions like Inheritance, Polymorphism types, Overloading vs Overriding. I was also asked about definition of Relational DBMS. This interview round went for around 30 min. Round 2: Technical Interview This Interview was mostly focused on CS fundamentals and Projects. The Interviewer was a senior person (Engineering Manager) in the company. He asked me to introduce myself and went straight to my projects. I explained the projects with more details in this round and was asked specific questions regarding how I did the implementation. He asked if I had knowledge of Computer Networks. I said that I am yet to complete this course on campus, so he just asked me a few basic terms like Firewall, TCP/IP, HTTPS. He then asked me which languages I was comfortable with. I mentioned I was good at C++ so he asked me about virtual functions, time complexity of performing insert and delete operations on a few standard data structures, and some questions on OOP in C++. Then he asked me if I had any questions for him so I asked about the company culture, what problems his team works on, how innovation is important for their product, what he thinks is the best part of working there, etc. He answered all those questions and overall this interview also went for around 30 min. Round 3: Interview with Manager The Interviewer was Director of Software Engineering in the company. He was assigned as the manager once I joined the company. This round was mostly about my interests and my projects. I started again with a basic introduction

and we went to discussing about the projects. Then the interviewer gave me an easy DSA question on arrays to code. He gave a few test cases to check if my code passes the edge cases and was satisfied with the code. Then he went to my interests and wanted to know what domains I had already worked in. I was eventually allotted a project in the company based on the discussion I had with the manager in this round.

Important Topics and Subtopics to Remember

DSA: Hash map, Linked Lists, Data Structures time complexity, Arrays OOP: Syntax in Java and C++, Abstract classes, Inheritance, Polymorphism, Method Overloading vs Overriding, some basic definitions DBMS: Relational Model, Normalization, SQL queries Having a basic knowledge of some Computer Networks topics like TCP/IP, HTTPS, and network security topics like firewall will be helpful.

Sources of Preparation

I did OOP in Java from Geeks For Geeks and W3Schools. Check out the commonly asked Interview questions for OOP on GFG. For DSA, I went through the topic wise playlists on takeUforward youtube channel to revise the common questions before Interview. During preparation I had used InterviewBit and solved the programming questions topic wise. Then I practiced questions on Leetcode as well. For DBMS I referred to my class notes and slides from the course taken on campus. For CN I referred to Geeks For Geeks for some topics, and their commonly asked questions.

Any Additional Comments

Prepare a good introduction to start the interview. Keep calm and do not panic during the interview. Ask the interviewer for more details on a question if it is not clear. Do not mention any topic you are not familiar with as you might be questioned multiple times on it. If you haven't studied about a topic, mention that clearly to the Interviewer. Have some knowledge about the company you are giving Interview for. Being attentive during their PPT will help you for this. Ask questions regarding specific product or work of the company during the interview to show your interest of working there. Make some notes for the CS fundamentals - OOPS, DBMS to revise them before the interview.

Palo Alto Networks

IT

SDE Intern

Bangalore

Stipend offered:100000

CGPA:8.55

Recruitment Procedure:

Three Rounds First Round: First round was a 3 hour round, 90 minutes for coding and 90 minutes for MCQ. Coding Questions - There were 2 coding questions. Both were easy/medium level and were solvable within 15 minutes. MCQ round - MCQ round consisted of 51 questions. These questions were based on logical reasoning, OS, OOP,DSA, Language basics etc. 14 people were shortlisted for the interviews Interview Round 1: The interview round started with the introductions and the interviewer explained a bit about the company. He asked me about what technical skills I have learned in my college years. He then asked me to describe 4 pillars of OOP with real world examples. Then he asked about all the data structures that I had used. He shared a live coding environment link and then asked me to code a simple question, Reverse a linked list. I had to first write a function to create a linked list and then another function to reverse a linked list. At every point he was asking me to reduce the code redundancy and try to write more in the form of functions. After that he asked me about the C++ memory management basics. About where the code is stored, where are variables stored, where is dynamic memory allocated. He then gave me a question of pointers and asked me to debug the code and point out the reason for runtime error . I was unable to find the correct solution, but I told him almost everything I knew about pointers. He then asked me why I wanted to intern at Palo Alto networks. The whole interview lasted for about 45-50 minutes 10 people were selected for second round of interviews (out of which only 8 interviews were taken) Interview Round 2: Second round was HM round. The interviewer was a senior engineer at Palo Alto. He started with pretty basic HR questions like introduction, what technical skills I have learned, hobbies etc. He then asked about what I liked about Web Development (My PS was in WebD role). He then gave me a task to design an app to facilitate the travel of Palo Alto employees to and forth from their office to homes. He asked me to tell me what basic features I would implement and what all Information I would need from him, to completely develop the app. I answered this question for about 10-15 minutes and he seemed pretty satisfied at the end. Then he asked me if I had any questions for him. I had prepared 3-4 questions for him and spent around 15-20 minutes discussing those questions. 7 days after Round 2 interviews, me and 2 other people were shortlisted for offer while others were hold in waitlist After recieving the offer, there was no contact with company for about 2 months. Then we recieved a communication for

another meet which was basically interaction with the manager. Few Technical questions were asked in this meet as well. After this, all the onboarding process was completed.

Important Topics and Subtopics to Remember

DSA OOP DBMS Language basics (Whichever language you are using, learn about its memory management, garbage collection etc..)

Sources of Preparation

Leetcode and Interviewbit for solving questions Youtube (Mainly Striver- Take u forward) for learning various DSA topics YouTube (Code with Harry) for OOP in C++ Codeforces for timed contests practice GFG for language basics, OOPS, DBMS Class slides for DBMS Top 50 Interview Questions - for OOPS, DBMS (usually same questions asked)

Any Additional Comments

Some people were asked in detail about their projects, so prepare well about the tech stacks you use in your project. Try to stay calm and interact with the interviewer. Listen to the clues he gives. In HM round, confidence is the key. In my opinion, don't prepare for HR answers in advance, just speak whatever comes naturally. Also prepare for questions to ask to the interviewer. Ask about the company, the role etc. DO NOT ask for the feedback of the interview.

PayPal

Data Science/ AI

Data Analyst

Bangalore

Stipend offered:100000

CGPA:8.78

Recruitment Procedure:

Round1 : ML and stats based coding round It had basic stat, maths and sql questions along with one python programming question. Round2: Technical Interview: the discussion started with my basic introduction and then we moved on to my projects in stats/ml. Then basics of stats were asked a lot. Also 2 complex sql queries were also there. Overall statistics and sql knowledge was of utmost importance here. Round3: Tech cum HR: Started by 2 basic tech questions and was rounded up by having an HR round. 4 case based questions were asked and what procedure and method will I use to solve them was asked. There was no wrong or correct approach. They just wanted to test how I think in a given situation.

Important Topics and Subtopics to Remember

Basics of stats and sql

Sources of Preparation

sql- youtube as well as dbms course (if you are a CS student) stats- youtube

Any Additional Comments

PayPal

Data Science/ AI

Data Analyst Intern

Chennai

Stipend offered:141000

CGPA:7.95

Recruitment Procedure:

Round 1 Hacker-Rank Test: There were 10 MCQ's based on OOPS, ML and DBMS. And there was a Python Question where we had to calculate BMI by making use of Inheritance and Function overloading. Round 2 Technical Interview: I was asked to introduce myself and then went through my projects which were in domain of Deep learning. I was asked about my projects in depth and also there were questions from Machine Learning domain. Further I was asked to write an SQL query in which I was given two tables and had to perform joins. I was also asked some basic python question based on lists, tuples and dictionaries. Round 3 Manager Round: I was again asked to introduce myself and was asked brief questions on my Deep Learning Projects. After that I was given few tables and I had to write window function in SQL to get the output. Further I was asked a puzzle question to find angle between the hour and minute hand in a clock at 3:15.

Important Topics and Subtopics to Remember

OOPS, DSA, DBMS, OS and a brief knowledge in the field of AI/ML.

Sources of Preparation

OOPS : Geeksforgeeks DSA : Any online course or sheet available. DBMS and OS : I studied both of these subjects for GATE so it helped me. AI/ML : Youtube and Coursera Course of Andrew Ng

Any Additional Comments

Publicis Sapient

IT

SDE Intern

Remote Option

Stipend offered:45000

CGPA:7.53

Recruitment Procedure:

Round 1: Coding Round: 3 questions were asked and all of them were medium to hard level. Some of them were picked up directly from leetcode. 11 students got qualified for the round after this. Round 2: Technical Interview: The round lasted for more than an hour for me. The interviewer wanted to test my knowledge in all the core cs concepts like OOPs, DBMS, DSA and also I had to solve 2 DSA questions in front of him by sharing the screen. One of them the find the longest palindrome possible in a string and another was on Binary Trees. The interviewer wanted to dive into topics like OS and CN but I told him that we were yet to cover these subjects as a part our academics. Round 3: HR: 9 students were qualified for this round. It was just a 30 minute interaction with an HR in which he tries to see how well you work in a team and asks your past experiences. 8 students finally got the offer letter.

Important Topics and Subtopics to Remember

DSA(Dp, Graphs, Trees), OOPs, DBMS

Sources of Preparation

Leetcode and Gfg

Any Additional Comments

Publicis Sapient

IT

SDE intern

Remote

Stipend offered:45000

CGPA:8.24

Recruitment Procedure:

Round 1: Technical Interview:' The round was majorly focused on core CS concepts like OOPS and DBMS. There were questions on multithreading and some standard questions on databases. I had some projects which were a bit aligned with the systems domain, so the interviewer even asked me questions from Computer Architecture. A major chunk of my interview was based on OS. As we were learning OS in 3-1, I was well prepared for it and found those questions relatively simpler. 'Round 2: Managerial/HR Round' in this round the entire discussion was around my projects. They did a deep dive into my projects and went into all the technical details. There were also questions based on the learnings apart from the technical know how that I gained from these projects. It was a mixed round of technical questions and HR questions.

Important Topics and Subtopics to Remember

DSA, OS, OOPS, DBMS

Sources of Preparation

Leetcode for DSA, GFG for CDCs

Any Additional Comments

Company' core values and competitors

Qualcomm

IT

SDE

Hyderabad

Stipend offered:45000

CGPA:9.05

Recruitment Procedure:

Round 1- Coding round. 2 medium level DSA problems and hard multiple choice questions from DBMS and core C programming. Round 2 - Technical interview. 2 medium level DSA problems could be answered in language of choice on leetcode. I was asked my two favorite topics in algorithms and the question were asked from it. Problem 1 - Right side view of a tree. Problem 2- Room scheduling problem, link <https://www.geeksforgeeks.org/minimum-halls-required-for-class-scheduling/> After the DSA question, fundamentals questions from oop was asked. One simple class implementation in Java was asked on the implementation part. After the oops question several questions were asked from resume. I had several web dev projects on my resume so react was asked in deep details. Standard questions such as why do you think you are fit for this role etc.

Important Topics and Subtopics to Remember

DSA, OOP, DBMS,

Sources of Preparation

All preparation was done using college slides, interview bit and gfg DSA course

Any Additional Comments

Qualcomm India

IT

Interim Engineering Intern

Hyderabad

Stipend offered:45000

CGPA:9.86

Recruitment Procedure:

Round 1: Online Test This round had 4 sections - C, Aptitude, Debugging and Computer Architecture/Operating Systems. The questions were quite straightforward and easy to do. One can easily find such questions online, for practice. There were only 5-6 questions on Comp Arch/OS. Round 2: Technical Interview My interview was short. The interviewer asked me to introduce myself. Then he asked me one easy DSA question, based on binary search. He then asked me if I have knowledge of Comp Arch/OS. I said No since it is not covered by the time of SIP. He asked me few verbal questions on DP and greedy. He majorly discussed my resume, ML project in it. I explained my project in detail.

Important Topics and Subtopics to Remember

DSA, Computer Programming, Machine Learning

Sources of Preparation

BITS Curriculum

Any Additional Comments

Qualcomm

Electronics

Hardware Intern

Bangalore

Stipend offered:45000

CGPA:8.57

Recruitment Procedure:

Round 1: Written Test It consisted of 3 sections: Aptitude, C-programming, and Digital Electronics: Each one in a half-hour window. 1) Aptitude section consisted of easy-moderate-level questions based on Speed, Distance, Time relations, Permutations & Combinations, some questions on Sequence Predictions, and 2-paragraph type questions. One of those paragraphs was based on some bar graphs, while the other one was a little twisted paragraph from which some information was to be mapped and decoded correctly. 2) Programming Section: This section mainly consisted of questions where we were required to predict the output or errors from some C code. You can practice some MCQs online from Geeks for Geeks. 3) Digital Electronics: This section focused on the basics of DD from topics like: K-map simplification, NAND/NOR gate-based circuit design, understanding of Flip-Flops, their characteristic equations, various types of Counters, Number systems, and Mux-based implementations. Some other questions included topics like - MuP, Verilog, and SAS. Round 2: Technical Interview In the beginning, the interviewer went over my resume and asked me to explain my PS-1 project. Then to explain my MuP project. After which, he went on to ask some questions about MuP, like how many cycles load and branch instructions take to execute and basic questions from Assembly Language. After this, we moved towards the concepts from Static Timing Analysis, where he asked me to explain Metastability and the origin of Setup and Hold Times. He asked more theoretical questions about this topic. Finally, we moved to some questions from Digital Design. He started off by asking me to make some Gates using MUX (like an XOR gate using a MUX) and to make certain Flip-Flops using some other Flip-Flops (like making a T flip-flop using a D flip-flop). Then he asked me to make an FSM for the sequence detection of 1011 (overlapping). From there, he asked me to make the static CMOS design for the NAND gate, then asked me to convert it into an AND gate. Overall, he asked some common doable questions. There was no HR round, we directly got the shortlist post this round.

Important Topics and Subtopics to Remember

Digital Design, basics from Microprocessors & Interfacing, Static CMOS design, STA and

Programming Basics.

Sources of Preparation

For STA preparation: <https://www.vlsi-expert.com/2011/03/static-timing-analysis-sta-basic-timing.html> & Yash Jain's YouTube Channel. For C-Programming: You can refer to some MCQs from GFG. <https://www.geeksforgeeks.org/c-multiple-choice-questions/> For Verilog Practice: hdlbits (https://hdlbits.01xz.net/wiki/Main_Page)

Any Additional Comments

Schlumberger (SLB)

Oil and Gas (Open for all core Engineering Branches)

Field Engineer

Reporting in Mumbai, Internship location can be anywhere in the country.

Stipend offered:10000

CGPA:7.9

Recruitment Procedure:

Round 1: Resume Shortlisting 6.5 CG was the cutoff. The Field Engineer isn't a desk job. Along with your CG, past internship experiences and extra-curricular activities were also taken into consideration. Only 25-30 resumes made it into the second round. Round 2: Group Discussion Your topic can be abstract or technical. The topic for my groups GD was "Hydrocarbons are the way forward" but for the other 2 groups the topics were abstract. For one it was "Balance" and for the other one it was "Diversity" (keeping yourself updated with current developments/important events in the company's domain can help). Candidates were split into 3 groups, around 50% candidates were taken from each for the next round. Round 3: Group Activity The shortlisted candidates were split into 2 teams. Each team was given a roll of transparent tapes, few marshmallows and spaghetti sticks. Teams were asked to make a structure that harnesses energy out of the given items in 10-15 mins and explain it once they're done. After that a number was assigned to every member of both the teams. Number 1 from team A was then asked to ask Number 1 from team B a question about team B's structure. After answering the question, Number 2 from team B had to ask Number 2 from Team A, a question about team A's structure and Number 2 from Team A had to answer. This would go on until everyone from both teams had asked and answered at least 1 question. Round 4: Interview This interview round was a mix of both HR and Technical. The interviewers were very polite and tried to make me as comfortable as possible. The technical questions were only on my SOP projects and my PS-I project. They tried to ask follow-ups to see how well you know the things that you have put on your resume. (Do not put the courses that you don't remember on your resume, if it's on your resume, they can ask you about it and you're supposed to know it). For the HR part they asked me who all was in my family, would I have any problems in working in regions far from home and also if I was okay with spending long hours in the field. This was it. Around 10 people made it into the final interview round and 4 people were offered internships. (PS: This firm did not have an aptitude round but generally a lot of core companies do. Even if you couldn't prepare much during the summer break, you can still catch up by taking tests online and going through the slides again during 3-1.)

Important Topics and Subtopics to Remember

Fluid Mechanics, Thermodynamics, Heat Transfer are important. Be well prepared for these 3 and any other 2 CDC's out of the 8 that have been covered.

Sources of Preparation

Textbooks and course slides are more than enough. Online tests for practice.

Any Additional Comments

SLB

Oil and Gas

Field Engineer

Can be sent to one or multiple locations out of Mumbai, Barmer, Kakinada, Vadodara and 2 stations in Assam

Stipend offered:10000

CGPA:8.5

Recruitment Procedure:

Round 1 - Resume Shortlisting Cutoff - 6.5 Projects/extra-curriculars were given significant importance. 23 people shortlisted Round 2 - Group discussion 3 groups each of 7 or 8 members Generally non-technical topics (diversity, balance, zero, hydrocarbons are the way forward were some topics from my time). Try to include numbers and real life examples while putting forward your points. 4-5 people were shortlisted from each group. Round 3 - Group Activity Selected candidates were divided in 2 groups. each group was asked to make a structure that can harness energy using marshmallows, spaghetti sticks and a role of tape. Each member of the group was given a number. No 1 from team A had to ask a question from no 1 of B, no 1 of B to no 2 of A and so on so that everyone gets a chance to ask and answer. Recruiters were continuously monitoring the groups and looking for people who are active, giving ideas and can work in teams. 10 candidates were shortlisted from this round. Round 4 - Personal Interview Slightly technical (to the extent that you know what's there on your resume) and predominantly HR. They'll ask about your projects, POR experience and would check if the role of a field engineer would fit.

Important Topics and Subtopics to Remember

Questions related to discipline were not asked.

Sources of Preparation

No special preparation required. Company looks for past leadership experience and exposure.



Any Additional Comments

SKF

Mechanical/Design

PDE

Bengaluru

Stipend offered:80000

CGPA:5.4

Recruitment Procedure:

Round 1 : Written Test , its a psychometry test they conducted Round 2 : Group discussion , here they made a group of 4 to 5 students and gave us a random topic to speak and review it instantly . Round 3 : Technical & HR Interview : Here they asked me some technical questions based on what i have written in resume , and then they asked me about extracurricular activities as well , why i ant to join SKF , how i would like to contribute etc .

Important Topics and Subtopics to Remember

Acoustics , Dynamics & Vibration , FEA & CAD

Sources of Preparation

Some from the BITS Coursework slides and some from Library , in the research books section

Any Additional Comments

Some sense of humor and effective communication techniques

SKF Engineering and Lubrication

Mechanical/Design

Application Engineering Intern

Pune

Stipend offered:80000

CGPA:9.11

Recruitment Procedure:

Round 1 : Test This round consisted of Technical and Aptitude test of 70% & 30% weightage respectively. Technical test mostly focused on Design subjects such as Strength of Materials, Machine Elements, Material Science and Aptitude included basic verbal and quant questions. Round 2 : Group Discussion Topic were given to prepare for about 2 minutes and the group discussion conducted for around 15 minutes. Round 3 : Psychometric assessments Psychometric assessments consisted of bunch of personality traits, intelligence, abilities, behavioral style questions Round 4 : Interview Interview round was last focusing on project work carried out and some technical stuff, question might will differ depending upon interviewer.

Important Topics and Subtopics to Remember

Strength of Materials, Design of Machine Elements, Geometric Dimensioning & Tolerances, Manufacturing Processes and Operation.

Sources of Preparation

Basic notes from bachelors courses taken will be sufficient

Any Additional Comments

SKF India

Electronics

Intern

Bengaluru

Stipend offered:80000

CGPA:8.28

Recruitment Procedure:

Round 1 : Aptitude Test Questions were from topics related to general aptitude questions and subjects related to Electronics(Digital, Analog, Control System, OPAMP, etc) and Electrical(Network Theory, Electrical Machines, etc). Most of the questions were easy and straightforward. However, the time limit per question was very less. Speed mattered a lot in this round as it was extremely difficult to attempt all questions of aptitude in the given time frame. Round 2 : Group Discussion 4 students were there in each group in this round. Topic given to our group was "Promoting Corporatization in India". Group Discussion went for around 30 mins. 3 students from my group were selected for the next round. Round 3 : Technical + HR Interview The interview primarily revolved around projects and past internships/work experience, with the interviewers delving deep into the details. The discussion extensively covered topics related to the projects, including sensor technology and interfacing. It was crucial to have a thorough understanding of every aspect mentioned in the resume, as the interviewers probed extensively.

Important Topics and Subtopics to Remember

Analog Electronics, Digital Electronics, Network Theory, Electrical Machines.

Sources of Preparation

For aptitude test : Refer Indiabix website For interview : Go through the basics of important subjects and have complete idea about implementation of all projects mentioned in your resume.

Any Additional Comments



Sprinklr

IT

Product Engineer (SDE equivalent)

Gurgaon

Stipend offered:200000

CGPA:8.35

Recruitment Procedure:

The whole recruitment process was divided into 4 rounds. Round 0 (Coding round) : This was an online coding round which consisted of 3 questions. The topics these belonged to were dp, segment trees and maths. Dp and maths question were standard one and similar to the questions present in interviewbit and leetcode. They were medium-hard question with more shift towards the hard level. For Dp I would suggest practicing the DP TRICKY portion in interviewbit. If you have time finish the complete DP bucket in interviewbit. Maths question was a general one and there is no specific resource for it. The segment tree question was a basic one and you don't need to know segment trees in detail. Round 1 (Technical Round) : 10 students were shortlisted for this round and 4 made it to the other round. This was fairly simple round compared to the coding round. They first asked lower bound and then asked to implement it. They shared a word document where I was writing. After that they asked me to find an element in rotated sorted array. Both these questions are standard one in binary search and you are expected to know. After that the interviewer asked me to tell the maximum subarray sum. It was Kadane's algorithm. This was also standard question. In the end he just asked pretty straightforward OOP DBMS questions. Round 2 (Technical Round) : 4 were shortlisted for this round and 2 made it to HR round. This was a decent round where they asked questions on greedy, graphs and trees. It started with a simple question which involved XOR. After that there was a greedy question from codechef. It was medium level only and I needed a hint from him. Then he asked me about topological sorting which I implemented. Then he asked longest path between two nodes in a graph. It was similar to the tree one. Round 3 (Final and Hr Round) : 2 were shortlisted and they were given the offer. This was a pretty basic round and I had prepared the values of Sprinklr before hand. You should go through the ppt the company provided and also study the company values for this. She discussed the project i did and it went well.

Important Topics and Subtopics to Remember

Important topics can be DP, greedy, graph and binary search. I just want to add that you should try to complete interviewbit and then you on to cover other topics. All the questions that were

asked to me were either same or similar to the ones present in interviewbit. While doing, you should try to come up with the most optimised solution to a problem and for that you can see the solutions after solving a problem.

Sources of Preparation

My SIP season started from July last week. By mid June I was done with the interviewbit and was solving leetcode problems from the contest section. There was no topic wise study, I just did the interviewbit and its buckets excluding maths and array. I would suggest that you should complete the interviewbit as soon as possible. Then you can study advanced topics like segment trees. For non-DSA, I followed a pretty straightforward tactic of reading most asked interview questions from various sources like gfg, interviewbit and javaTpoint. This will work for CS students as you have a basic idea of the course and you just need to revise the important topics. For non-CS, just try to watch a crash course video and then try to go through as many important interview questions as you can. After 1-2 sites, the questions will start getting repetitive which will help in getting important points revised as well. Summing up, for dsa complete interviewbit and for CS fundamentals, just google top asked OOP interview questions and completely read the top 4-5 links. That would be more than enough.

Any Additional Comments

There are a few companies which ask puzzles like D.E.Shaw and a few companies that ask system design. Try to do that specific to companies. Also, dont get disheartened if you dont get ahead. There are many companies and if you will work hard, you will be selected.

Sprinklr

IT

Product Engineer Intern

Gurugram

Stipend offered:200000

CGPA:9.66

Recruitment Procedure:

Round 0: Coding Round 3 questions were there of very good level, Q1) Tries using 2-d array, normal trie implementation (using struct) was giving MLE (medium- hard level) Q2) Dp + prefix sum + suffix sum (hard) Q3) don't remember (sorry) (it easy- medium) The total points of all 3 questions were around 200, and whoever scored above 100 (approx.) was selected. Sprinklr (unlike other companies) select everyone who clears their cutoff in coding round for interviews. I was able to do the 3rd and 1st (almost 90%). After coding round, 9 students were selected for interviews. There were total 3 interviews, 2 technical + 1 HR. 5 were rejected and 4 went on to give interview round 2. 2 were rejected and 2 went for HR. Finally both the students who gave HR were given final offer. Round 1: Technical Round (1) The interviewer was very nice and made me comfortable by having a small chat and then he started on. Firstly, we had a discussion on my resume. The interviewer started by asking me about my introduction and then we asked me about the projects. He did not specifically ask about which one, so started by telling him about my PS-1 project which was a research project in Deep learning and I explained him everything in detail of how I proceed with it and all the difficulties I faced. We discussed it for around 15-20 mins. He had no time to ask anything so he quickly moved on to questions. Then he asked me about the 4 pillars of OOP, but he did not want the basic definition but a proper difference between those. I explained them with examples. He then gave a scenario that suppose a women is going to bank to deposit some money then which of the 4 OOP pillars are applied and how. Then he told me to write all the sorting algorithms I know, asked me their time complexities and space complexities. Then finally a Dsa question (easy one) : Given a string of lowercase letters and given a key letter, arrange the string such that all the letters which are small than key should be on the left side, and the higher ones on right , BUT their relative position should not change. Ex: string : abwycxza and key: m Ans: abcawyxz I immediately gave the idea of quick sort but then realised it was wrong as the relative positions will change, he generously told to check again and that's when I found my mistake. I thought for a minute loudly, and then started telling the approach and also explained why it would work. As there was no time left to code it up, he told that I was going on correct direction and told not to code. Round 2: Technical Round (2) The interviewer asked about a little about Algomaniac and my cp journey a little, also he was impressed by how diverse and good the resume was. He then

quickly jumped to questions. The first question had some json code, and I had literally 0 idea what was written. I told him that I have not done dev and so am not getting anything. He then started explaining what the written code means (there were some objects, and objects inside objects). He then explained the task to do. I started going it in C++ (OOP), I was parallelly explaining what I am writing and how it is achieving the task. As quite some time was spent on this, he moved on. Then one easy DSA question on standard priority queue like merging k sorted arrays. Then here comes the best part, he randomly asks me if I use bookmyshow, I said yes, He said let's make it. He told to use DBMS concepts to do it, I told him about the tables we will need for movie, cinemas, etc and will connect them using relationships like one-one, etc. and also made ER diagram on google doc which he shared. I also explained how the locks need to be applied on the seats while someone is booking some seats so others can't access that. The lock can either timeout or be released if payment is done successfully, also told some things about concurrency control. Also wrote some raw sql queries of how we will find if a movie has left in a cinema for a given time. Round 3: (HR Round) Was very chill and was asked normal HR related questions. Both the students who sat in HR were given final offer.

Important Topics and Subtopics to Remember

OOP, DBMS, DSA

Sources of Preparation

InterviewBit, Leetcode, Codeforces

Any Additional Comments

Standard Chartered

IT

SDE

Chennai

Stipend offered:40000

CGPA:8.36

Recruitment Procedure:

Round 1: Analytical and Value-based round: Asked simple questions in the form of games testing analytical and logical skills and a video-based section for testing value-based knowledge. It was a bit time-consuming and needed patience to solve all questions, but it was worth giving the time as they selected only about 50 students for the next round. Round 2: Coding Round: 2 DSA questions, one on Tree and one on Graphs, both questions were Medium level. Round 3: Technical interview: Tested my OOPS and Java knowledge as most of their codebase is built on Java. I was also asked questions on SQL and its comparison with NoSQL, and discussed projects mentioned in my Resume. All questions were answered orally, and no screen sharing was necessary. Round 4: HR interview: Frankly it was just more of a friendly conversation than an interview. The interviewer just asked about my hobbies and interests and we talked about the company and its activities. Round 5: HR interview: The interview was just a formality to conclude the process, he asked standard background information and other concluding remarks and questions.

Important Topics and Subtopics to Remember

Graphs is quite important for the coding round. OOPS, preferably in Java. DBMS/SQL

Sources of Preparation

I solved GFG mainly for DSA preparation, and the popular 150 Questions dataset. For OOPS in Java I studied from various YouTube channels such as CodeWithHarry, and Telusko. For SQL I watched FreeCodeCamp PostgreSQL tutorial on YouTube. I would also recommend reading basic DBMS topics if time permits from GateSmashers channel.

Any Additional Comments

I would implore everyone to give the analytic and value-based round patiently, no matter how tedious it might seem, as they do tend to eliminate many people in this round. This might sound obvious but I must highlight how important it is to be confident in the interview. I was asked questions orally in the interview, so the interviewer paid close attention to how confidently I answered my questions, she also tried to trick me a few times to see if I would falter, but it is essential to stay calm and remember that nervousness will cost more than a wrong answer. Even if you don't know the answer to a question, take some time to think and try to connect it with some concept you are aware of.

Standard Chartered IT

SDE Intern

Bengaluru

Stipend offered:40

CGPA:8.96

Recruitment Procedure:

Round 1: Coding Round There were two questions related to Graphs. Question 1: This was a simple BFS question, with a minor modification. Question 2: The question was to choose edges in a graph such that sum of weights of these edges is maximum and the degree of each node does exceed k. This was a much harder problem and a greedy solution was enough to proceed to the next round, even though it did not pass all the TCs. Round 2: Technical Interview After being asked to introduce myself, I was asked a lot of questions based on my projects and computer science fundamentals. Project Related Questions: 1) Why did you make this project? Is it an academic project or one you made out of your own interest? 2) Why did you choose this particular language or framework? What are the downsides? 3) What other functionalities would you be interested in adding? This was followed by some standard OOP and DBMS questions which I was well versed with at this point. I was not asked a single DSA question. The interview was also very short compared to other technical interviews I was part of and I was not given any feedback on my answers. Round 3: HR Interview This was a generic HR round. The two questions which stood out were 1) When companies like Google and Microsoft visit your campus for placements, why are you interested in working for a bank? Will you accept a PPO, if offered one? (Keep in mind it is a pretty big loss for the companies when many interns reject their PPOs) 2) Tell me something about yourself that I can't find about you on the internet

Important Topics and Subtopics to Remember

DSA, OOP, DBMS, Projects Going through the standard questions in OOP and DBMS from GFG is enough for companies like Standard Chartered. In Arcesium Round 2, which I failed, I was asked to design a Covid Vaccination Portal from scratch and code it in Java since I had mentioned the OOP course in BITS was in Java. The questions then moved on to which classes I would make abstract or an interface and why. I was also grilled on the uses of abstract classes, interfaces, runtime polymorphism etc. Clearing such interviews will take deep understanding, not just surface-level definitions.

Sources of Preparation

DSA - Leetcode, Interviewbit, Striver and Neetcode for video explanations on YouTube DBMS, OOP - GFG CTCI has a nice section on how to answer design related OOP questions

Any Additional Comments

Start devoting time to learning OOP and DBMS early on, as you will only have a little time between the announcement of the shortlist and the interviews. I missed out on a great opportunity at Arcesium simply because I needed to spend more time revising OOP and DBMS and was focused on DSA. There is a lot of repetition of questions in interviews. If someone has had an interview before you, ask them for the questions, as there is a good chance you'll get the same. The same goes for CRs as well. If you have friends in other colleges, ask them. Campus Hiring is not entirely meritocratic. There is a lot of cheating. You can do everything right in the interview and get rejected for no apparent reason. You can get fortunate with the questions asked in the interview, or not. Take care of your mental health and remind yourself that this is not the end all be all of your career.

Standard Chartered IT

SDE

Bangalore/Chennai

Stipend offered:40000

CGPA:8.04

Recruitment Procedure:

Round-1:Pymetrics Assessment & Valued Behavior Assessment : It consisted of some pymetric games , the questions were simple based on basic aptitude. After these questions , there was a value behavior test where there were situation based mcq questions and one had to choose what would they prefer doing given a specific scenario . Round-2:Online Coding Test: There were 2 questions both were based on graphs (difficulty level was around medium to hard) . Round-3:Technical Interview: The interviewer asked me to introduce myself then he went on asking me about the projects I had worked upon and asked me to explain one of my projects in detail and the tech used behind the project . I went ahead with an App dev project which I had worked upon . After I explained him the project he crossed questioned me about the project and asked me to explain me some specific parts of the project and what logic I had used for that particular part and why . He further asked me what improvements I could have done in that project . After this , he asked me questions on Object Oriented Programming in Java language , he started with questions such as what is polymorphism and why is it used , what is the difference between static and non-static methods , what is the use of interfaces in Java and then told me to write codes in Java and show how is inheritance implemented in Java and how can one implement Multiple inheritance in Java , how data abstraction is implemented (using abstract classes and interfaces) and how is HashMap and HashSet implemented in Java. After that he gave me a question on Binary search (Medium level) and told me to write an optimized code for it and finally he asked me to write the codes for Bubble and Merge sort and explain the logic for Merge Sort . This interview was 30-45 mins long . Make sure you are familiar with OOPS (in Java) and Java programming as there were many questions asked on it . Round-4:Interview: The interviewer asked me to introduce myself after that he told me to tell about my previous internship experience and the project I had worked upon during the internship . I explained him the objectives of our project and how was it implemented and what was my contribution in the project . He then asked me few questions regarding the project and what were the main challenges I faced while working on the project. Round-5:HR round: It lasted around 10 mins and the HR asked me why I wanted to join the company , what are my future goals etc.

Important Topics and Subtopics to Remember

DSA , OOPS in Java are a must .

Sources of Preparation

For DSA: Leetcode , GfG , Interviewbit For OOPS : <https://www.interviewbit.com/oops-interview-questions/> <https://www.geeksforgeeks.org/oops-interview-questions/>

Any Additional Comments

Standard Chartered GBS

IT

SDE

Chennai

Stipend offered:40000

CGPA:8.54

Recruitment Procedure:

Round 1 : Behavioral Round - We had to solve some behavioral questions in the form of case-studies and games which were time-bound. It tests speed, accuracy and EQ. Round 2: Coding Round (DSA only) - Many were eliminated in Round -1. We had to solve 2 Leetcode Medium/Hard question. 1 was BFS+Math and other was a DP leetcode hard Problem. I could solve 1.5/2 questions. Round 3: Technical Round - 15 people were shortlisted. Resume Discussion. Went deep into projects and asked even the minute details of my projects. Should know all your projects thoroughly and should be able to explain all the concepts of DBMS and OOP used in the project. Asked DBMS and OOP basic to medium questions. Interviewer was happy with my answers. I could not answer 1 question which I told them I do not know the answer instead of giving a wrong answer which the interviewer liked. No DSA was asked. Round 4: Technical Round 2 - 8 people were shortlisted. Had an informal discussion with Senior Tech Leader of Standard Chartered. He asked about my interests and hobbies. Then he proceeded to ask about some real world banking problems and asked my opinion about how do we solve them using tech. Interviewer was happy with my answers/solutions. Round 5: HR Round - 7 people were shortlisted. Just a formality from the HR about stipend and CTC incase PPO accepted. Then got the offer.

Important Topics and Subtopics to Remember

DSA>>>>>DBMS==OOP

Sources of Preparation

DSA - Leetcode (Use discuss section for PYQs) GFG DBMS - CS Course Slides GFG Important Questions for interviews OOP - CS Course Slides GFG Important Questions for interviews

Any Additional Comments

Be honest about answers in the interview. Do not pretend to know the correct answer as the interviewer easily can catch it easily. Do not falsify your resume. Put only the projects which you are sure of thoroughly

Standard Chartered IT

SDE Intern

Bengaluru

Stipend offered:80000

CGPA:7.21

Recruitment Procedure:

Round 1: Behavioural test. They tested us on our behaviour in certain situations. It was conducted on the Pymetrics platform. Those who were shortlisted went on to give the coding round. Round 2: Coding round. Two problems were asked. Both were based on graphs. Round 3: Technical interview . Was asked about my projects and had to solve a simple array problem. Round 4: HR Round. We talked about the company culture and work environment. The best thing to do here is to be a little casual, it wasn't that formal.

Important Topics and Subtopics to Remember

DSA(graphs and dp are necessary), A simple project is also beneficial

Sources of Preparation

Leetcode, TakeUForward on Youtube, GeeksforGeeks

Any Additional Comments

NA

TCS Research

Data Science/ AI

Research Intern

Pune

Stipend offered:20000

CGPA:8.1

Recruitment Procedure:

Round 1: Interview It had various questions on various topics; the interview heavily relied on the projects in my CV. They started by questioning my Practice School project, adding layers of complexity to the problem statement. They asked about my approach to acquiring data, then added the complexity of what would happen if I had too much or too little of it, and so on. They then questioned me about my student project (in my case Project Kratos) and what approach I had used; this led to a discussion on whether I knew about Python internals and parallel processing. Since I had also done a project on GPU parallelization, they questioned me on how some specific DSA-related approaches would change on multithreaded machines. For example, if we can achieve any significant gain in sum reduction or sorting algorithms. All-in-all, most of the discussion revolved around my projects and changes in my approach if the problem statements differed slightly.

Important Topics and Subtopics to Remember

General machine learning concepts, General DSA (probably not as much as an SDE would require), impeccable knowledge of the projects written down on CV, including some minor and more in-depth details.

Sources of Preparation

Andrew Ng's combination of courses on Deep learning specialization would help a lot.

Any Additional Comments

If possible know about what TCS research is in-general working on before hand in your field.



Texas Instruments

Electronics

Digital Design Intern

Bangalore

Stipend offered:60000

CGPA:8.93

Recruitment Procedure:

Round 1: Online Assessment. This had 4 sections- digital, analog, embedded and aptitude. You have to write whichever sections you applied for along with aptitude. The selection for each role is independent of how you perform in the other sections. For aptitude section, you just have to clear the cut-off. There were questions mostly on sta, digital design and inverters. The cutoff for selection for the online assessment is usually high as the questions aren't that difficult. Round 2: Technical Interview. My interview lasted for almost 2 hrs. The first 40 mins were about the projects on my resume. So ensure you know the ins and outs of your projects, especially if you have some that are directly related to the job profile. The rest of the questions were mostly on digital design(included questions about multiple latches in series and also pulse detection without a clock) and some from inverters from advd. There were also questions from binary number theory - floating point approximation and some probability based questions as well. They did ask some very basic verilog as well. Make sure you explain your whole thought process throughout the interview. Think out loud, instead of just remaining silent. If done right this can help you understand if you are thinking right by seeing the interviewer's response.

Important Topics and Subtopics to Remember

Digital Design STA Frequency division Inverters - basics

Sources of Preparation

Pyqs for the written round, from pu material. For the interview, go through basics from morris manno, also refer technical bytes on YouTube. Also check out vlsi universe for sta questions and fifo depth.

Any Additional Comments

Texas Instruments

Electronics

Analog Design Intern

Bangalore

Stipend offered:60000

CGPA:9.31

Recruitment Procedure:

Round 1: Written Test - Contains 3 Sections, Analog, Digital and Aptitude Analog contains questions of various difficulties on topics such as RC Circuits, Switch-Cap circuits, Op-Amps, Network Theory, application specific circuits like clippers and clampers, Microelectronics, etc. Digital also has questions of varying difficulty on topics like Timing, Delays, STA and Combinational/Sequential logic, pass transistor logic, a few questions based on Microprocessors and Memory are also present Aptitude is typical find the next in the pattern, what time will two things happen simultaneously if they occur at different rates, etc. type generic questions, but you need a minimum score in this section to pass the test, so study this well.

Round 2: Technical Interview - Contains fundamental level questions on whichever (analog/digital) role you were selected for. The topics are similar but the circuits become more complex and must be answered from basics rather than by memory or by using formulae. Analog will have RC/OpAmp circuits that they keep making more complex as you answer the questions. Digital will ask you to build sequential circuits based on certain problem statements, or explain the function of some given circuit.

Important Topics and Subtopics to Remember

ES and DD are the MOST important. MuE and MuP less so. Other topics that I have mentioned above should be studied thoroughly.

Sources of Preparation

<https://docs.google.com/document/d/1oNWsmlpEtUYmwdETxqLZiO31YZeldNK08lvUtMsxwf4/edit>

Any Additional Comments

Make sure you approach everything from basics in the interview, and keep voicing out your thought process/question solving strategy. Treat it more as a conversation than a test. The interview is not about getting the answer right as much as it is about them trying to gauge your thought process and problem solving skills.

Texas Instruments

Electronics

Analog Design

Bangalore

Stipend offered:60000

CGPA:8.88

Recruitment Procedure:

Round 1: Written Test The written test included 3 sections: One/Two of the profiles you had opted for(I had opted for Analog and Digital) and Aptitude. Options for profiles were Analog, Digital and Embedded Software. Analog and digital had a 45 minute time limit whereas the Aptitude was a 30 min time section. The test started off with aptitude which was pretty standard quantitative reasoning questions expected in entrance exam. The time for the same however was a little less and you have to be fast to attempt all the questions. All in all, it's possible to complete 70-80 percent of this section within stipulated time ensuring complete accuracy. Analog Section included multiple questions on first order RC circuits mixed with basic circuit analysis. Many of these questions can be solved by intuitive understanding of the circuits rather than solving the questions entirely by hand. For example instead of writing transfer functions for the whole RC network, understanding the final and initial conditions and nature of the response would help in solving these questions faster. There were few questions on Operational Amplifiers and Amplifier configurations as well which required an in-depth understanding of amplifier working and practice solving amplifier circuit configurations. Overall, this section was moderately difficult and attention should be paid time and accuracy while solving. Digital section was actually easiest section with ample time for the questions. Questions were asked on MUX logic synthesis, K-map logic synthesis, flipflop states in a FSM, T flipflop design using MUX and CMOS logic synthesis. Couple questions on Verilog were also asked, but they were very basic. Question was asked on hamming code and its synthesis which is could be difficult if one does not know hamming codes. To conclude, digital was easier comparatively but there was a lot of room for silly mistakes. Round 2: Technical Interview I had cleared both Digital and Analog written rounds and was shortlisted for the interview which was scheduled after two days. Digital Interview: The interviewer asked me to introduce myself and asked me a couple of questions about the course work I had done and which language I was comfortable with (VHDL or Verilog). The first question was whether you can make all logic gates using a half adder and if not, what all gates can you make. I was asked to make whatever gates were possible. I asked interviewer whether I was allowed to use Tie inputs and he said you could. I got the question correct in about 5-7 minutes, all the while being vocal and explaining my thought process. Next question was based on making a 16x16 multiplier using a 4x4 multiplier. He then asked me

basics of static time analysis and gave me couple of questions about finding critical path and max frequency. He then asked the same question with modifications in clock skew and propagation delays. Once he was satisfied with all the scenarios under which the circuit given can fall into, we moved on from STA. The interviewer asked whether I was familiar with clock domain crossing and asked me questions about it. We started off by discussion about metastability and synchronizers. Then he asked me questions about transferring a pulse from slower to faster and faster to slower clock domains. I did get stuck at some points but asked for hints and got to correct answers with the interviews hints. He then asked me gave a basic FSM buzzer based circuit and asked me to make the state diagram and explain the circuit synthesis process. To finish off, couple of easy questions on Verilog were asked and a logic puzzle (which I recognised to be from GFG) was given. The interview lasted for about 1.5 hrs. Analog Interview: Again, we started off with introductions and moved to the courses done in college related to IC design. Some basic RC circuits were given and I was asked to give impulse and step responses of them. Then I was asked to plot bode plots and give stability analysis of the systems. I was asked to give a basic all-pass filter circuit and explain the reasoning behind coming with the circuit. We then had a discussion on power consumption in CMOS circuits and sources of power loss and ways to reduce power consumption, the tradeoffs involved. My interviewer then gave me a choice whether I wanted a one really big tough problem or couple of small ones. I went for the tough problem. The problem involved finding whether the circuit had a glitch or not. It was pretty involved with having op-amps, RC circuits, a MOSFET and few digital components. I was able to get to the answer with interviewers hints within 10-15 minutes. The interview lasted for about 45 minutes. Round 3:HR interview I got a call in the evening that I had cleared both interviews and they had asked me to choose between Analog and Digital profiles. I chose Analog since TI is mainly an Analog company.

Important Topics and Subtopics to Remember

Analog: Basic electrical science concepts like network theorems. First order RC circuits and their intuitive analysis, Second order RC circuits (RLC and Q factor only). Two port networks, star delta conversion. Amplifier configurations and finding resistance seen through various nodes and small signal gain calculation. Bode plots, transfer function analysis, calculation of poles and zeros. Operation amplifier basics and circuits like differentiators, integrators and so on. Digital: Digital design basics such as Boolean algebra, K-Maps, gate level reduction and combinational circuit design (Adders, subtractors, multiplexers, decoders). Sequential Circuits concepts such as latches, master slave configurations, flipflops, fsm's, state reduction, registers and counters (ring, binary and Johnson). Microprocessor-8086 ISA and architecture. Verilog- Behavioural modelling of rudimentary combinational and sequential elements Computer architecture- Pipelining and data hazards and dependencies Static timing analysis, clock domain crossing and frequency dividers are very important advanced topics.

Sources of Preparation

Analog: Engineering Circuit Analysis by William Hayt is good book to begin with for network theory and RC circuits. Best source of preparation is Professor Chembiyan T Sir's introduction to electrical sciences lectures on YouTube. Bode plots, poles, zeroes and stability criterion is covered in control systems course. Laplace and Fourier analysis is to be learned from signals and systems coursework. The premidsem portion for Microelectronic circuits is enough for solving

the questions related to the topics. Operation amplifier-Sergio Franco: Operational Amplifier is good book to start with, you will also find many videos on YouTube covering Op-Amp basics and practice questions, do go through them. Digital: Digital Design coursework is more than sufficient, for practice go through Morris Mano. Verilog- Best source to practice and learn is hdlbits website. Computer architecture: GFG articles on pipelining and data dependencies are good start, one can refer to Computer Architecture and design by Hennessy for in depth understanding. Static timing analysis- VLSI expert website, ADVD notes

Any Additional Comments

Texas Instruments

Electronics

Digital

Bangalore

Stipend offered:60000

CGPA:8.79

Recruitment Procedure:

Written round: The test had two sections: General Aptitude and Digital/Analog(or both if you want to attempt them) The digital section had questions mostly about digital design concepts. There were direct questions, e.g., the number of possible states in N bit Johnson counter, Ring counter, etc. Some were from FSM concepts, questions on Verilog code snippets and Static Timing Analysis concepts. You must have a thorough knowledge of Digital design concepts. Refer to Morris Mano for this. For general aptitude, try to solve question papers provided by PU and previous year papers. Technical Interview: The most important thing is to explain your approach to any question to the interviewer effectively. Your approach and depth of concepts are more important than just arriving at any answer without proper reasoning. The interviewer started the interview with simple questions like Make all the logic gates from a 2:1 MUX, Is the XOR gate universal?, making XOR gate from a minimum number of NAND gates, design 32:1 MUX from a 2:1 MUX, how can you modify the design to prioritize specific inputs over others? Frequency divider circuits, etc. Then he asked fundamental questions related to Verilog, like the working of 'always' and 'initial' blocks, the difference between 'net' and 'reg' types, how to assign values to the 'reg' type, etc. After that, he moved on to questions regarding developing a state diagram for a circuit, minimizing the number of states, and eventually designing the circuit using Flip flops and logic gates, changing the type of flip flops used for the same, then further optimizing it, etc.

Important Topics and Subtopics to Remember

Digital Design(FSM, Verilog), ADVD(STA)

Sources of Preparation

Morris Mano, YouTube playlists for STA, preparation material provided by PU



Any Additional Comments

Texas Instruments

Electronics

Analog Design Intern

Bengaluru

Stipend offered:60000

CGPA:8.51

Recruitment Procedure:

Written Round : Questions based on Mosfets , Opamps and basic ES in the Analog Section
Technical Interview : All selected candidates had one interview which lasted for around 50 mins. Interviewer started by asking some questions which were asked in Written round and my approach used in that question. It was a simple BJT question but i hadn't prepared for BJT as it was not taught so i struggled a bit , but after some hints i was able to solve it. Next he asked me a few questions on charge sharing and discharging in Capacitor followed by Questions on RC circuits which included drawing the voltage waveform. Schmitt trigger concept in Opamps was asked and i had to derive the expression. No questions based on projects done or resume were asked to me but be thorough with your resume because some interviewers do ask them.

Important Topics and Subtopics to Remember

RC,RL Circuits and their responses to different inputs like step , pulse , impulse. Intuitive understanding of poles , zeroes in circuits. Microelectronics , Control Systems CDC'S. OPAMP Circuits (Basic knowledge about it will be sufficient)

Sources of Preparation

Chembian Sir's lectures from his YouTube channel (Mue , RC , Opamp) Other topics from class notes

Any Additional Comments

Uber

IT

SDE Intern

Bengaluru

Stipend offered:160000

CGPA:7.9

Recruitment Procedure:

Round 0: Coding test: It had 3 questions. The first question had a brute force solution. The second question was greedy and it revolved something around making a string palindrome by doing some operations. The third question had a dp+bitmasking solution. This was the toughest of the 3 questions. Everyone who got shortlisted has solved the first 2 completely and the third one partially. After this, 16 people were shortlisted for the interviews. Round 1: Coding /problem-solving round: The interviewer seemed quite jolly and asked me to introduce myself (just usual formalities). And told me that the round is going to be a coding /problem-solving round. He gave me this problem: <https://leetcode.com/problems/2-keys-keyboard/> At first, I gave him an $O(n \log n)$ solution using sieve of eratosthenes for prime factorization, but he told me to optimize it further. Then i gave him an $O(n)$ dp solution which he again told me to optimise further. At this point, I had no hopes of optimizing it further so he gave me a few hints to lead me to the right approach. Finally, with the help of that, I arrived at an $O(\sqrt{n})$ solution by which he was satisfied. To check whether my solution was correct, he gave me a few random testcases to which my code gave the correct output. All of this was done on a shared code editor(Codesignal). I had less hopes for qualifying for the 2nd round since I had received so many hints from him, but somehow I got in. Round 2: Coding /problem-solving round: This had to be a system design round (which would have continued the last year trend), but it became a DSA round only. This time, my interviewer was a bit serious from the start. He told me that my focus should be more on the code quality rather than solving the question (though solving the question was also required). This was the question: <https://leetcode.com/problems/kth-smallest-element-in-a-bst/> (Kth largest element instead of smallest) I had been practising OOP last night for this round and they gave me the only topic that I didn't know at all, binary search tree. I became very underconfident at the start of my interview. I tried coding the solution and took a lot of help from my interviewer. After I had completed implementing the main problem, he asked me to complete the insertion in a binary search tree part as well. I hadn't practised insertion before at all so I tried coding up something, but as the time was very less, he just asked me to give the approach, which I gave successfully. Just lucky I guess, cause I made it to the final HR round as well. Round 3: HR + system design round: The interviewer was a very senior person (Engineering manager with an MS and 15+ years of experience). First I was asked my intro and

then my research internship project details. There was a detailed discussion about it for around 25 min. I thought the HR round was going to be a short one, so after this discussion I thought the interview would be over, but it was just the start apparently. He asked me a system design question (only my idea to approach the problem). Then he dived into OOP and DBMS, asking fundamental questions from that. Then he asked me some HR questions and also what changes I would want to make to the Uber app. . The total duration of the interview was around 50 min. At the end of all the interviews, I was given time to ask the interviewer a few questions. I had around 0 hopes of getting an offer, because the HR round went so serious, but again luck favored for me. Overall, the interview process was very smooth and they covered almost everything one would prepare.

Important Topics and Subtopics to Remember

DSA and System design.

Sources of Preparation

<https://leetcode.com> There are many articles on system design question on [geeksforgeeks](https://www.geeksforgeeks.org/)

Any Additional Comments

Visa Inc.

IT

Data Engineer

Bengaluru

Stipend offered:70000

CGPA:7.21

Recruitment Procedure:

Round 1: Coding Round (online) It was an hour long test which was conducted on Hacker Rank platform. There were 12 questions which included MCQs on DSA, SQL, OOP and Aptitude. So, do remember to revise SQL also along with DSA. It was low to medium difficult. 25 students got shortlisted for another round. Round 2: Technical + HR It started with the introduction. My interviewer was Director at Visa Inc., in GDS team. So, he was at a senior position and hence was more interested in my approach of giving answers. He started questions about my projects and PORs from my Resume. We had a good in-depth conversation about why I am pursuing for software/data roles if I have Economics. I gave my reasons and he was quite impressed. Then, he gave me a puzzle, and asked me to answer from a Economist point of view. Then from a Data Engineer point of view. In the end he asked me a DSA question on priority queue and OOP concepts. In the end, he asked me if I had any doubts and then I asked him about his role and intern projects which he answered very elaborately. PS: After, I got the internship, I was in his team only and we continued the interview conversation in our first meeting:3 From India, there were in total 143 interns from IITs, NITs, IIITs, DTU, IGDTU etc. including us 7 from BITS Goa.

Important Topics and Subtopics to Remember

DSA, OOP, DBMS

Sources of Preparation

*Take You Forward YouTube channel for DSA. *Striver A-Z SDE sheet. *Practice questions on Leetcode. *Refer to InterviewBit roadmap. *Keep a track of your performance with a friend to have accountability. *Learn about the company before an interview. *Have a good idea about your Resume and your projects.

Any Additional Comments

I started my preparation after my 3rd year Compres (I am a ECO+ENI dualite) . During my summer break after that, I practiced DSA consistently for a good 4 months and tried to continue after coming to campus also in 4th year. Before getting Visa, I got shortlisted for Uber, Microsoft, Arcesium and Accenture. I got rejected in Uber's first interview round, Microsoft's second round and for Arcesium I even went till HR round, but got rejected in the end because they had to take only 3 people, and other 3 had better CG and branch. So, by this I just want to convey that don't let rejections dishearten you. Trust me, the more experiences you will get, the more confidence you'll gain to face interviews. Keep applying and give Coding Rounds seriously. Yesterday only I got the PPO offer from Visa Inc. of 35LPA CTC. I truly enjoyed my internship experience there and is excited to join as Full timer. Keep giving your efforts, All the very best! It will be all good int the end:)

VISA INC.

IT

Data Engineer

Bangalore

Stipend offered:65000

CGPA:8.16

Recruitment Procedure:

Round 1: Online Test: Question Related to SQL, Basic Data Science and Data Structures.
Round 2: Interview: This round varied for different interviewers, my round was for 40 minutes revolving around basic resume discussion, discussion about what I know like Concepts related to Databases or concepts about data handling. In this round situations were given to me (real life) and I had to solve them step by step discussing with the interviewer where he was assessing my skills in breaking the problem and arriving at the solution.

Important Topics and Subtopics to Remember

Database Concepts, Basic DSA

Sources of Preparation

SQL: w3schools.com Other Topics were generalised and varied

Any Additional Comments

VISA

IT

Data Engineering

Bangalore

Stipend offered:70000

CGPA:7.99

Recruitment Procedure:

Round1: Coding Round It consisted of 12 MCQ questions related to mental ability. Other than this there was one DSA question related to priority queue. I would say it was comparable to a medium level question on Leetcode for Priority Queue. The last question was writing a SQL query. Hackerrank can be a good resource for practicing this. Round 2: Technical Interview It was more like an HR round than a technical interview. The interviewer asked me to introduce myself and was pretty friendly. She asked what were my weakness and what I did in college to improve that. Resume was slightly important for this round. She asked a little bit about the projects and then moved on to a scenario based question: "VISA is connected with a lot of hotels. You have to suggest to a hotel whether it should increase its price or not. For this calculation you have all the data available" I answered that since we have the current price and the number of people availing the service right now and a previous point, we can calculate the equation of the line and we can assume the demand and price to be a straight line for the ease of calculation. We can thus put this point in this equation and calculate the new revenue and based on that we can decide. She then further gave the slope value and asked whether now this would be a good decision and I was able to calculate and give an answer. She ended the interview after asking if I had any questions regarding VISA. The overall interview was only 25 minutes and no dsa or any other technical question was asked to me. It was more towards how fast you can come up with a solution to some random scenario.

Important Topics and Subtopics to Remember

DSA is a must. Use Leetcode wisely. Use the PU IT Preparation Sheet Since the role was data engineering, I did DBMS from a Youtube channel called Gate Smashers. For SQL, I used Hackerrank and W3S School. I did not do OOP or any other CS topic

Sources of Preparation

DBMS Playlist:

<https://www.youtube.com/playlist?list=PLxCzCOWd7aiFAN6l8CuViBuCdJgiOkT2Y> SQL:

<https://www.hackerrank.com/domains/sql> <https://www.w3schools.com/sql/> You can google the commonly asked HR Questions and should come up with some good answers for most of them.

Any Additional Comments

VISA Inc

IT

Data Engineer

Bengaluru

Stipend offered:65000

CGPA:7.76

Recruitment Procedure:

Round 1: Coding Round It was conducted on Hacker Rank. We were given 12 questions for 1hr which included 10 MCQs, 1 DSA, 1 SQL question. The 10 MCQs were based on OOPs, DBMS, and C programming language. We also had a few aptitude questions. The DSA question was a very easy Priority Queue question. Where we had to pick the best 2 values and add their sum to our cost. This was a basic Priority Queue question ,should be doable by everyone. The main problem arised in the SQL coding question. The question was a little ambiguous and for some reason it was not working for me. After a good 20 min of pondering I got the logic. Coded it and submitted the test with 40 min. I think time was a factor in the selection process. Only 25 students were selected for round 2. Round 2: Technical + HR We started with the typical interview question about my introduction. Then he asked me why I wanted to join VISA. I had researched about VISA quite a lot. I had in-depth knowledge about VISA products like visanet and figures like 200 countries and territories. He was happy with my knowledge. He then saw my Resume and started asking a few questions on that, I answered them as I had already given a few mock interviews for the same. Then we moved on to the technical side. He asked me to implement Inheritance, abstraction, polymorphism, and encapsulation in the language of my choice in CODE-PAIR Hacker Rank. The language I chose was C++, I would recommend watching love babbar's 1hr video about OOPs in C++. After that we moved on to SQL queries, We coded a good over 5 queries and had a discussion about life at VISA. He asked me if I had any questions about VISA, this is where I asked "What kind of projects does VISA allot to the interns and what all interesting projects have you worked on?". He became really excited and told me all about the projects he did. The interview was supposed to be for 30 min, but he took it for over 45min. It was a great experience.

Important Topics and Subtopics to Remember

DSA, OOPs, DBMS for sure. A little of OS and CN knowledge would be great.

Sources of Preparation

DSA- Strivers playlist along with GFG practice. OOPs - Love Babbar DBMS - Jenny's lectures/
DBMS slides OS- Slides CN- Slides

Any Additional Comments

Read about the company a lot, Impress the recruiter with your knowledge.

Walmart Global Tech.

IT

SDE Intern

Bangalore

Stipend offered:100000

CGPA:8.73

Recruitment Procedure:

They conducted a global coding round in which 30-35 colleges were eligible. The hackathon had 2 coding rounds and each of them was an elimination round. Top 150 students who cleared both the rounds were selected for the internship. There were no interviews or HR rounds.

Round 1: Coding Round There were 2 questions, I remember one of them. We were given a string S which is formed by only 2 characters say p & q. We have to find the number of good string of length N where good string was defined as follows: 1. if it contains odd no. of p and no q and vice versa 2. if A is good & B is good then A+B is good only if last character of A is not same as first character of B. This round was easy relative to the round 2.

Round 2: Coding Round There were 2 questions here as well. One was some variation of the longest common subsequence problem. The second question was, there are N trees on a number line each on an integral position and there are M sprinklers, they are also present on the number line. A tree and sprinkler can exist on the same point. Now each sprinkler can sprinkle water to k units. So we have to find the minimum value of k to sprinkle all the trees. This question is also just a variation of binary search, where we apply the search on the answer itself.

Important Topics and Subtopics to Remember

DSA: graphs, DP, greedy

Sources of Preparation

GFG, leetcode, striver(youtube series)

Any Additional Comment



Walmart

IT

SDE

Bangalore

Stipend offered:100000

CGPA:8.58

Recruitment Procedure:

Unstop sparkplug hackathon Round 1. Mcq questions: consisted of questions from oops, dsa and basic cs fundamentals Round 2: Coding round 1: 2 easy/ medium questions on arrays and second one on string Round 3: Coding Round 2: 2 medium/ hard questions, first was based on arrays and second one was on bit manipulation and dp

Important Topics and Subtopics to Remember

The mcq round is quite basic and just studying the basic cs fundamental will do it and since it didn't have any interviews so only good practise on DSA is required

Sources of Preparation

Leetcode, gfg. I would recommend solving striver's dsa list.

Any Additional Comments

Walmart Global Tech.

IT

SDE Intern

Bangalore

Stipend offered:100000

CGPA:8.73

Recruitment Procedure:

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Important Topics and Subtopics to Remember

DSA: graphs, DP, greedy

Sources of Preparation

GFG, leetcode, striver(youtube series)

Any Additional Comments



Walmart Global Tech India

IT

SDE intern

Bangalore

Stipend offered:100000

CGPA:7.79

Recruitment Procedure:

There were three rounds. First round was cs fundamentals oop and DBMS . Rest both coding were rounds only .There was a question related to matrix multiplication (Strassen Method) in the second round. There was a question related to maximum cost subarray (difference between square of sum of even indexed and odd indexed elements).

Important Topics and Subtopics to Remember

DSA OOP

Sources of Preparation

Leetcode gfg

Any Additional Comments