

Adobe

Profile: Research and Development intern

About Adobe

Changing the world through digital experiences is what Adobe's all about. We give everyone—from emerging artists to global brands— everything they need to design and deliver exceptional digital experiences. We're passionate about empowering people to create beautiful and powerful images, videos, and apps, and transform how companies interact with customers across every screen. We're on a mission to hire the very best and are committed to creating exceptional employee experiences where everyone is respected and has access to equal opportunity. We realize that new ideas can come from everywhere in the organization, and we know the next big idea could be yours. Adobe Research is looking for forward-thinking minds who are passionate about pushing the state of the art in research areas that impact Adobe's products and future endeavors.

Job Description

- Under the direction of an Adobe Research mentor, pursue a research problem that pushes the boundaries of the field
- Explore an area of research, define a specific problem and defend it
- Generate alternative solutions, design new algorithms, implement and validate
- Publish results in journals or conferences, or identify invention disclosures (patents).

Shortlisting Process: Resume Shortlist, Test, Interview

CGPA Cutoff : NIL

Test : Yes, 1 hour 20 mins

GD: No

No of interview rounds - 1

Interview:

- The first half of the interview is about your resume so be thorough with your resume and the next half is technical.

- They usually ask about your favorite project in the test and the interview. Make sure to mention the same project and if it is something related to ML, that would be beneficial.
- It is not mandatory to have prior research experience but if it's not too late and you have a chance choose to gain the research experience.
- Three or four questions similar to the ones asked in the test will be asked. So they will be based on Probability, Math Puzzles, and Algorithms.

Suggestions:

- Having research experience, especially in Machine Learning will be helpful as this role is a research one.
- The deciding factor is the test and you have to perform well in the test.
- The test comprises of questions from Probability, Linear Algebra, and Algorithms
- The questions and level difficulty weren't extremely hard if you are decently prepared.

Preparation Material:

- Probability : Bertsekas and Tsiklis , Intro to Probability
- Codechef DSA,codeforces and Leetcode competitive coding
- Heard on the Street
- Machine learning concepts

Open for:

- Btech: Computer Science & Engg
Electrical Engg
Engineering Physics
- Dual Degree: Computer Science & Engg
Electrical Engg
Physics
- IDDD: Data Science,Robotics, Quantum Science and Technology

Stipend: 100000 Monthly

Link To Video Fundaes:

<https://drive.google.com/file/d/16kmr9qWG0Lpz6ypn3JU9nb5LRHOfvUb7/view?usp=sharing>

American Express

Profile: Data Science/Data Analytics.

About Company

Amex is a multinational financial corporation specializing in payment card services and travel-related services worldwide. They are a leading issuer of personal, small business, and corporate credit cards. The company's travel-related offerings include traveler's checks, credit cards, corporate and personal travel planning services, tour packages, and agencies for hotel and car-rental reservations.

Job Description

We offer a student program to strengthen your skills and help shape your future personally and professionally. The Internship Program is considered one of the key entry points for our full-time campus hires. It is a project-based program that provides you with the opportunity to address real business challenges and offers you access to senior leaders, professional development activities, fun social events, and more. Specific job responsibilities will depend on the project assigned to the intern. Overall, all projects will require the intern to

- Analyze large amounts of data to derive business insights and create innovative solutions
- Leverage the power of closed-loop through the Amex network to make decisions more intelligent and relevant
- Innovate with a focus on developing newer and better approaches using big data & machine learning solution

The Data Science interns at American Express are put into one of the two divisions: Credit & Fraud Risk (CFR) and Enterprise Digital & Analytics (EDA). They will be working on a single live project throughout the course of 8 weeks and help in building and improving the ML models and understanding its behavior.

Shortlisting Process:

Resume shortlist, Test, Interview

CGPA Cutoff:

There is no known CGPA cut-off. >8.5 is recommended, but performance in tests is more important.

Test:

Reasoning, Business Study, Probability, General Aptitude, and Machine Learning

Three sections:

1. General aptitude and Math (speed is crucial) - basic mental ability, 25 questions - 25 minutes
2. Machine Learning - from Andrew NG's course, 10 questions - 10 minutes
3. Business Case Study 25 minutes

The business case study is slightly different. A situation is given and there are several questions as are given below. There were a total of 53 questions. We can query at most 26 questions and the answers for the selected question will be visible. After we exhaust those 26 questions or after we feel that we have enough information, the question pops up. Using the answers obtained from the queries, we need to choose the appropriate course of action. So, we have to choose the 26 questions properly. I have done some consult case study prep which also has what is called 'preliminary questions', and hence that was useful for me in this section.

GD: No

No of interview rounds - 1 technical round and 1 HR interview

Interview:

Round 1: Technical

- Completely Resume based - walk through the resume
- Even the machine learning questions were related to the points mentioned in the resume.

- Explain simple ML models, ML and DL algorithms. They also ask puzzles from Heard on the street.
- A guesstimate question was asked in round 1 - demanding the estimation of daily revenue of the railway station in your city.
- Case study questions

Round 2: HR

- HR is mostly about the company and its business model.
- your likes and dislikes, strengths and weaknesses.
- Case study question to check thinking process

Round 3: NA

Suggestions:

Though Amex offers Analytics roles they ask quant questions during your interview rounds.

For the Data Analytics profile, quantitative aptitude carries more weightage than competitive programming as aptitude questions are asked in tests of all the companies offering internships in the profile. Hence, Heard on the Street and Introduction to Probability by Dimitri P. Bertsekas and John N. Tsitsiklis were very helpful books for both tests and interviews.

American Express does not ask Coding Questions but checks your programming knowledge from the projects and internships mentioned in your resume.

Also, solve a few guesstimate questions, as they are being regularly asked in AmEx interviews.

Few Analytics roles ask for coding (SQL, Data structures). Hence it is necessary to prepare for these if you are to be guaranteed a role in Data science

Practicing for tests and giving mock interviews helps a lot.

Knowledge of SAS, Java, Hive, Pig, Python, and SQL is a plus.

Have knowledge of MS Office – PowerPoint, Excel.

Preparation Material:

- Probability: 50 challenging problems in probability.

- Introduction to Probability by Dimitri P. Bertsekas and John N. Tsitsiklis (book)
- Puzzles: Books - Heard on the Street
- Website - GeeksforGeeks
- Machine Learning: ML course by Andrew NG - MCQs.
- YouTube channel - StatQuest
- Data Analytics: Introduction to Statistical Learning by Gareth James
- Linear Algebra: Gilbert Strang.
- Introduction to Data Analytics (MS4610) course also helps for Amex.
- For practicing competitive programming.- LeetCode/ HackerRank
- For practicing quantitative aptitude. - Brainstellar
- Speed math and aptitude: websites like prepleaf.com, indiabix

Open for

- Btech: All
- Dual Degree: All

Stipend: 100000 Monthly

Link To Video Fundaes:

<https://drive.google.com/file/d/1u4q5MGh8e7dlUGIVx-0tqr-C9QvvAz-H/view?usp=sharing>

Analog Devices

Profile: Core - Digital Interns

About Analog Devices

Analog Devices is a global leader in the design and manufacturing of integrated circuits to help solve the toughest engineering challenges. Analog Devices enables our customers to interpret the world around us by intelligently bridging the physical and digital with unmatched technologies that sense, measure and connect. We create innovative solutions to solve design challenges in instrumentation, automation, communications, healthcare, automotive, and numerous other industries.

Job Description

Related to Designing circuits for specific functions

Analog Devices Inc (ADI) is looking for Digital IC Design and Verification Engineers for its Chip Design and development team in Bangalore, India.

The selected students will work on chip development based on ultra-deep submicron semiconductor process technologies. They will be guided and trained by ADI's experienced design and verification engineers.

This will include

- Development of key digital blocks and SoCs.
- Development of optimal micro-architecture and design by analyzing power, performance, and area tradeoffs.
- Verification of key digital blocks and SoCs in High-Speed signal converter /Communication products.
- Definition of test plan, tests, and verification methodology for block and chip-level verification.
- They will use industry-leading CAD tools.

Shortlisting Process: test, interview

CGPA Cutoff: 8

No of interview rounds - 3

Interview: Each interview 1-1.5 hours and 20 minutes HR

Round 1:

- Coding

Round 2:

- Time analysis, Computer Organizations

Round 3:

- HR / Technical

Suggestions:

- Be thorough with whatever you put in resume
- Be thorough with the courses you have taken
- Try to explain whatever you know about interview questions even if you don't know the exact answer.
- Learn system verilog and put in resume

Preparation Material:

- Digital Systems course (Core course second sem)- NPTEL video lectures
- Learnt some concepts from internet
- Books: Morris, Static Town

Open for:

- Btech: -
- Dual Degree: EE

Stipend: INR 50000/month

Link To Video Fundaes:

https://drive.google.com/file/d/14HXPJK_dYBShtlwbHsiRRi6roNC66dLv/view

APT Portfolio

Profile: Data Science/Data Analytics

About: APT Portfolio is a proprietary high-frequency trading company (HFT) that does trading in large scale at various stock markets using curated trading algorithms, specializing in quantitative trading and investment strategies. They execute all their automation algorithms on FPGAs to make them more efficient and they seek to provide liquidity in the markets. The strategies are tested rigorously and are based on advanced concepts drawn from the field of machine learning, economics, mathematics, financial engineering option theory, etc. They have earned their standing as one of India's largest traders in the derivatives market across asset classes. With a rapidly expanding global presence, they aim to be among the top ten global trading firms, in terms of volume traded within the next five years.

Job Description

JD indicated the involvement of software and data engineering and quant as well.

The Data Engineering team works on the integration, consolidation, management, and analysis of the different kinds of data that is collected from the firm's trading activities and different exchanges we trade with. The team also works on developing the firm's quantitative research and modeling infrastructure for backtesting and simulations of strategies.

You will be part of a team that is intellectually curious, creative, analytical, and passionate about building complex data infrastructure and digging into data for analysis and/or market research.

As an intern with the Data Engineering team, your responsibilities may include -

Working with the team for the design and development of our in-house machine learning and quantitative research platform, covering aspects like data validation and integration, feature selection, optimizations, and modeling.

Coming up with strategies to scale and optimize the platforms for faster learning as well as prediction using selected models.

Deepdive and POCs in optimizing Python code for speedy execution and resource management on a computing grid

Collaborate on building the next-gen data management infra to store and process several TBs of data daily and its interactive API.

Reviewing research papers and experimenting with new features and modeling techniques

What you will learn at the end of the internship.

You will develop a deeper understanding of Trade Data and associated functions

You will have learnt techniques for Scaling and Building robust data infrastructure

You will have built Deep Knowledge of Python/GoLang/C++ in the enterprise, beyond basic syntax.

You will sharpen your skills in machine learning and statistical modeling.

Though the portal mentions the profile as Data Analyst role, the job has quite a bit of involvement of Software Engineering as well

Shortlisting Process:

Resume shortlist, Test, Interview

CGPA Cutoff: 8

Test :

Data Structures and Algorithms and Probability, Linear Algebra, Coding

3 coding questions, and 12-13 MCQs based on Probability, Linear Algebra

Probability questions were mostly simple and JEE level.

Programming languages: Python and Golang

GD: No

No of interview rounds - 2 technical rounds, no separate HR interview

Interview:

Main focus on problem-solving ability and Knowledge of Python internals and features, and good DSA skills.

2 data structures and algorithms questions, a few questions on Python-specific internals like Decorators and Generators, and a few questions on basic Operating Systems

If you are not sure about a question, tell them clearly and they will change the question.

Suggestions:

- Read about Python-specific features.
- Practice Leetcode medium-hard questions.
- Have decent practical on data structures and algorithms
- Starting early and practicing regularly is recommended
- They look for good problem-solving skills
- Having a good CGPA and projects is helpful
- Try to gain some practice through mock interviews

Preparation Material:

- Practice of DSA from websites like Leetcode and Interviewbit, and also probability from 50 challenging problems and brainstellar.
- Solve many problems on Leetcode, codeforces.
- MA2040(Probability), MA2031(Linear Algebra) class notes

Open for:

- Btech: All
- Dual Degree: All

Stipend: 200000 Monthly

Link To Video Fundaes:

https://drive.google.com/file/d/1s_R0laPOYP7BhuiG2xGHE9s0HYzVELsT/view?usp=sharing

APT Portfolio

Profile: Hardware Engineering

About Company APT Portfolio is a proprietary high-frequency trading company (HFT) that does trading in large scale at various stock markets using curated trading algorithms, specializing in quantitative trading and investment strategies. They execute all their automation algorithms on FPGAs to make them more efficient and they seek to provide liquidity in the markets. The strategies are tested rigorously and are based on advanced concepts drawn from the field of machine learning, economics, mathematics, financial engineering option theory, etc. They have earned the standing as one of India's largest traders in the derivatives market across asset classes. With a rapidly expanding global presence, they aim to be among the top ten global trading firms, in terms of volume traded within the next five years.

By deploying advanced algorithms they develop custom hardware for low latency trading.

Job Description

The company develops custom hardware for low latency trading. The role is to test and validate the hardware and execute all the automation algorithms on FPGA systems to make them more efficient

Shortlisting Process:

Resume shortlist, Test, Interview

CGPA Cutoff: 8+

Test:

Digital design. Basic Python and C programming, VHDL

There were 10 Core questions and one of them was descriptive. The rest of which were MCQ, Fill up's and T/F.

GD: No

No of interview rounds - 2 technical rounds, no separate HR interview

Interview:

Round 1:

- They concentrated purely on Digital systems as far as technical questions are concerned, but in case you have any projects on Microprocessor or Computer Organization be prepared to answer all the technical questions from them as well concepts dwelling around them. The technical questions asked were purely from Digital systems

Round 2:

- Python round was fully output-based questions from the OOPS concept.

Round 3: NA

Suggestions:

- Knowledge of C / C++
- Proficiency in python mainly OOPS concept.
- Python round during the interview made the most distinction, make sure you are confident in it. They mostly dwell around Core OOPS concepts which most people don't practice in the hustle of preparing core concepts.

Preparation Material:

- Digital Systems class notes, basic materials
- Microprocessor and Computer Organization
- Python
- Book: Morris Mano - Digital design
- Book: William Stallings and Patterson Hennessey
- Website:
<https://www.includehelp.com/c-programming-examples-solved-c-programs.aspx>

Open for:

- Btech:
 - * Computer Science & Engg
 - * Electrical Engg
 - * Engineering Physics
- Dual Degree:
 - * Computer Science & Engg
 - * Electrical Engg
 - * Physics

Stipend:

200000 Monthly

Bain & Company

Profile: Consulting

Bain & Company is a global consultancy that helps the world's most ambitious change-makers define the future. Across 59 offices in 37 countries, the firm works alongside clients as one team with a shared ambition to achieve extraordinary results, outperform the competition, and redefine industries. Bain & Company complements its tailored, integrated expertise with a vibrant ecosystem of digital innovators to deliver better, faster, and more enduring outcomes.

Job Description

Our summer internship program for bachelor's degree candidates provides broad exposure to the consulting industry and teaches business strategy through full-time immersion on a Bain case team.

As an Associate Consultant Intern (ACI), you'll begin with a week of intensive training led by our experienced consultants—and very similar to the training received by new associate consultants. If you meet our performance expectations, you'll receive an offer to return full-time as an associate consultant upon graduating.

Shortlisting Process: Resume Shortlist

CGPA Cutoff : NA

Test : NA

GD: NA

No of interview rounds - Most offers were rolled after the first round (30-40min)
But there were candidates with round 2.

Interview:

Round 1:

- Starts with HR questions (All around what you are interested in)
- Case (12min-25min)

- Open for any questions

Round 2:

- Will be conducted by the partner
- case/guesstimates

Preparation Material:

- Day 1.0
- CIS
- IIM A Case Book

Open for:

- Btech: All
- Dual Degree: All
- IDDD: * Advanced Materials and Nanotechnology
 - * Bio-Medical Engineering
 - * Computational Engineering
 - * Data Science
 - * Robotics
 - * Quantum Science and Technology
 - * Tech MBA

Stipend: 140000 monthly

Link To Video Fundaes:

<https://drive.google.com/drive/folders/1Z5gKMaM0rE4RLGimZzwp1AAsZnaygHx8>

BCG

Profile: Consulting

About BCG:

BCG is one of the top 3 management consulting firms in the world. The firm offers creative solutions to a plethora of problems that trouble companies from various sectors. It is a global consulting firm that partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG's success depends on a spirit of deep collaboration and a global community of diverse individuals determined to make the world and each other better every day.

Job Description:

- As a Summer Intern, the candidate will work on a case team with talented, supportive BCGers who will help them learn and encourage them to grow. They will be challenged to develop firsthand knowledge of clients' critical business issues, building client-management, problem-solving, and communications skills. As a case team member, they gain a 360-degree perspective on life as a BCG consultant—from working on client projects to socializing with colleagues, etc.
- On joining BCG, Summer Interns undergo an orientation program, which introduces them to the core consulting skills and tools. In addition, there is a well-established mentoring process that helps them through their internship.

Shortlisting Process: Resume shortlist, Interview

CGPA Cutoff: No

GD: No

No of interview rounds - 3- (3technical)

Interview:

- I was given one guesstimate and 2 unconventional cases.

- Guesstimate the number of students who gave the JEE-Adv exam from your hometown in 2019
- A firm that sells televisions has been seeing depreciating market shares. Identify the issue & provide recommendations.
- A banking group that offers insurance has incompetent sales forces in some parts of the country - point out the key issue & synthesize feasible recommendations.

Suggestions:

- Don't get tensed. The minute you let anxiety take over, the situation slips from your grip. Nervousness leads to stammering & fuzzy communication, it also prevents proactive thinking.
- Trust the process, and believe in your buddies!
- At the end of the day, all that matters is your happiness & peace of mind. Rather than applying for multiple profiles, most of which don't pique your interest in the first place, wittily choose ones that intrigue you. Play to your strengths & believe in yourself. Trust the process & don't come to conclusions until you have substantial points supporting your hypothesis - your mind is your strongest enemy :)

Preparation Material:

- Quintessential consult stuff. In addition, Go through multiple articles & videos religiously, on a daily basis, to bolster ur business acumen.
- You must participate in case study competitions from early on to get an advantage.
- Books, buddy cases, YT videos, consistently practising with ur case group :)

Open for:

- Btech: All branches
- Dual Degree: All branches

Stipend: 130000 to 150000 Monthly

Link To Video Fundaes:

<https://drive.google.com/file/d/1Vyr2-CBT4-dWb2yO1kBVluJBgJgVT3FN/view?usp=sharing>

Bajaj Auto Limited

Profile : Core

About Bajaj Auto Limited:

Bajaj Auto Limited is an Indian multinational automotive manufacturing company based in the city of Pune, India.

It manufactures motorcycles, scooters and auto rickshaws. Bajaj Auto is a part of the Bajaj Group.

Job Description:

The candidate will join as a Graduate Trainee Engineer (GTE) and can be deployed in any of the businesses like R&D/Engineering/Materials/Project Management/Manufacturing etc

Shortlisting Process: Resume shortlist, Test, Interview

Number of offers: 8

CGPA Cutoff : 7

Test : Yes.

Test mainly focussed on Mechanical core concepts . The questions were asked from SoM, IC engines, MaD, Thermo, Applied Thermal topics.

Technical & Aptitude Test + Selected candidates from here would get Psychometric Test

Sample Questions:

Finding stress from Mohr's circle

Which of the following causes engine knocking?...

GD: No.

No of interview rounds - 2 (1 Technical and 1 HR)

Interview:

Technical Round :

- Questions were mainly focused on core topics
- Questions about the projects done were also raised
- Some General Questions were also asked
- Sample Questions asked during Interviews: How is dynamic rotary balanced? Name the machines used and the principles used
What is the percentage of ethanol-ethanol blended fuels?
Why core profile?

HR Round:

- General HR Questions

Suggestions:

- Have a thorough understanding of the core concepts mainly the ones you have done a project about
- Talk about the projects you have done.
- Look at Bajaj's Website to know what they are doing
- Core is a hit or miss, Talk to your seniors to get a pulse of the good and the bad of different profiles. Have a backup plan as well
- Prepare some good questions to ask them at the end if they ask, This will end the interview in a nice tone

Preparation Material:

- Mech course notes
- Google for Bajaj tests for past year questions
- Gate Questions and ISRO Tests

Open for

- Btech: Mechanical Engineering
- Mtech:
 - * Applied Mechanics
 - * Chemical Engg
 - * Electrical Engg
 - * Mechanical Engg

Stipend: 40000 Total duration + 10000 Accommodation



Profile :Software Engineering ,Hardware Engineering

Cisco (NASDAQ: CSCO) enables people to make powerful connections--whether in business, education, philanthropy, or creativity. Cisco hardware, software, and service offerings are used to create the Internet solutions that make networks possible--providing easy access to information anywhere, at any time.

Cisco was founded in 1984 by a small group of computer scientists from Stanford University. Since the company's inception, Cisco engineers have been leaders in the development of Internet Protocol (IP)-based networking technologies. Today, with more than 71,000 employees worldwide, this tradition of innovation continues with industry-leading products and solutions in the company's core development areas of routing and switching, as well as in advanced technologies such as home networking, IP telephony, optical networking, security, storage area networking, and wireless technology. In addition to its products, Cisco provides a broad range of service offerings, including technical support and advanced services.

Cisco sells its products and services, both directly through its own sales force as well as through its channel partners, to large enterprises, commercial businesses, service providers, and consumers

Shortlisting Process: Test

CGPA Cutoff : >7

Test :1 Hr coding +MCQ (Acc to Hacker Rank)

GD: NA

No of interview rounds - 3 for software ,2 for hardware

Interview:

Round 1:

Software- DSA

- Write an algorithm to describe the top view of a tree

Hardware

- Asked to explain the project from microprocessor course
- How inverted graph actually look
- Gave state machine graph and asked to plot it and give equations about it

Round 2:

- Based on projects
- Graph, graph algo

Round 3:

- HR Round

Suggestions:

- Make sure you can explain the projects you put in the resume
- Don't go completely silent during the interview

Preparation Material:

Hardware Role -

- Morris Mano for digital systems
- Digital System nptel

Software Role

- Geeks for Geeks
- Codeforces

Open for:

- Btech: All
- Dual Degree: All
- IDDD: * Advanced Materials and Nanotechnology
 - * Bio-Medical Engineering
 - * Computational Engineering
 - * Data Science
 - * Robotics
 - * Quantum Science and Technology

* Tech MBA

Stipend: 87,000 month

Cohesity

Profile : Software Engineering

About Cohesity

Cohesity radically simplifies data management. We make it easy to back up, manage, and derive value from data -- across the data center, edge and cloud. Cohesity also helps ensure data is in compliance and protected against ransomware attacks. We offer a full suite of data management services consolidated on one multi-cloud data platform, reducing complexity and eliminating mass data fragmentation. Cohesity can be delivered as a service, self-managed, or provided by a Cohesity-powered partner.

We've been named a Leader by multiple analyst firms, and are prominently featured in the Forbes Cloud 100 and CRN's Coolest Cloud companies. Our growth is off the charts, and we're just getting started!

Job Description

Member of Technical Staff - Intern at Cohesity Bangalore / Pune

What Does Impact Look Like For Cohesity's Interns

As a Software Engineering Intern, you will be embedded within our software engineering teams, contributing to the same complex challenges they're focused on. Voted Forbes top 40 hottest startups, you will be working on cutting edge distributed systems technology and building product features that customers will use. We are looking for technically strong and motivated individuals to join our team. You will learn how to develop high quality software and understand the various software development processes to ship successful products.

- You will work alongside your mentor and your team to build product

features and solve real problems at massive scale

- You'll be exposed to cutting edge technologies in distributed systems and hyper-converged systems space.
- Be part of our culture and mission in transforming data
- You will deliver impact while deepening your technical

What's Required To Be An Intern @ Cohesity

- Actively pursuing Bachelors / Dual Degree in Computer Science or related engineering field from a premier Institute.
- Strong programming skills in any: C, C++, or Go and OOP
- Competent in Data Structure, Algorithms and Systems Design
- Experience working with some of the following: Unix/Linux environments, distributed or parallel systems, machine learning, asynchronous programming, networking, developing large software systems, and/or security software development.
- Enjoy solving difficult problems and possess critical thinking abilities.
- Coachable, motivated, and humble
- Ability to demonstrate his/her own projects and achievements
- Willing to take on difficult problems with a positive attitude.

Shortlisting Process: Resume Shortlist, Test, Interview

CGPA Cutoff : NIL

Test : Yes

Topics asked: DP, DFS/BFS , math logic , binary search majorly

Sample Questions:

- Question based on disjoint set union Data structure (problem was about graphs)
- Difficult graph question that can be solved using DFS/BFS with some modifications.

GD: No

No of interview rounds - 2 Technical Rounds

Interview: Questions based on math logic and basic data structures were asked.

Preparation Material:

- Dynamic programming standard questions
- Code forces
- Leetcode

Open for:

- Btech: Computer Science & Engg
- Dual Degree: Computer Science & Engg

Stipend: 120000 Monthly

Credit Suisse

Profile: Risk Management

About Credit Suisse

Credit Suisse offers you the ideal environment to start a successful career, attractive benefits, excellent training, and managers to support your development. We are a leading wealth manager with strong global investment banking capabilities founded in 1856. Headquartered in Zurich, Switzerland, and with more than 45,000 employees from over 150 nations, we are always looking for passionate people to make an impact on our clients and communities. Credit Suisse is an equal opportunity employer. Welcoming diversity gives us a competitive advantage in the global marketplace and drives our success. Our bank provides reasonable accommodations to qualified individuals with disabilities, as well as those with other needs or beliefs as may be protected under applicable local law. If you require assistance during the recruitment process, please let your recruiter know. Credit Suisse complies with applicable federal, state, and local laws, as well as regulatory requirements, regarding considering the employment of qualified individuals with criminal histories and prohibiting discrimination in employment in every jurisdiction in which it maintains facilities. Credit Suisse is also one of the major firms in the bulge bracket.

Job Description

Your field of responsibility:

To build up and grow our risk quant teams in Mumbai, we are offering role in

- Model Development: Development and maintenance of comprehensive and consistent risk models for credit risk, market risk, liquidity risk, enterprise risk and stress testing areas, meeting both internal management and regulatory requirements

Your responsibilities include:

- Develop models, ensuring theoretical soundness by employing advanced mathematical and statistical techniques.

- Demonstrate independence in testing design and execution, results interpretation and presentation, and production of robust documentation.
- Collaborate with colleagues across the world, and will regularly engage with partners such as business, senior management and regulators.
- Play a role in the documentation and review of risk capture, sensitivities, and data assets used in the model
- Proactively seek solutions to improve material parts of the model; review and improve components; identify the relevant sources of risk and assess their capture.
- Ensure that models are adequately documented for both internal and external (e.g. regulatory) purposes.
- Assist in preparing presentations for senior management covering change impacts, methodology features, and capital implications.

Your future colleagues:

The Risk division (CRO) is a strategic and dynamic partner for Credit Suisse businesses. We are responsible for modeling, measuring, supervising, and handling risks across multiple dimensions including credit, market, operational, reputational, and liquidity. The Risk division acts as the guardian of the bank's risk appetite and provides effective and independent risk oversight. For our employees, we provide a collaborative and meritocratic environment with direct contact with senior management and encourage leadership at all levels.

We are a department that values Diversity and Inclusion (D&I) and is committed to realizing the firm's D&I ambition which is an integral part of our global cultural values.

Your qualifications and skills:

Credit Suisse is noted for the diversity of its employees, but seeks colleagues with a common set of abilities – highly motivated and creative individuals who have demonstrated academic achievement, and have the ability to work independently and as a member of a team. We'll be looking at your potential, your ability, your academic background, and your extracurricular activities. Quantitative, mathematics, statistics plus financial products: The candidate has an understanding of financial mathematics/statistics and its application to risk modeling.

- Degree in mathematics, physics, econometrics, statistics, or engineering is preferred. Professional qualification e.g. CFA, FRM, PRIMA would be an advantage.
- Good understanding of financial and derivative products, and risk modelling. Strong foundation in Probability and Statistics.

- Outstanding analytical and problem-solving skills, and knowledge of risk management concepts and techniques such as PD/LGD, VaR, Stressed VaR, regression, and time series modeling.

Shortlisting Process:

Resume Shortlisting, Test, Interview

CGPA Cutoff: <8.5, lower cutoff not known

Test:

Short test which consisted of eight questions of mainly linear algebra and probability.

GD: No

No of interview rounds - 3 rounds

Interview:

Round 1:

- Preliminary interaction focusing on resume points such as projects (especially ML-related) and skills with a special focus on finance and trading.
- Around 20 minutes.

Round 2:

- Technical round with a few HR questions.
- Technical questions involved coding (question asked to one of the interviewees: How to swap two numbers without using a temporary variable), probability (mostly from 'Heard on the street'), linear algebra, and ML.
- Basic HR questions like why finance and where do you see yourself in the next five years.
- Around 15-20 mins.

Round 3:

- HR round, more of a formality after selection.

Suggestions:

- Strong coding knowledge of data structures and algorithms helps, so practice coding.

- A fair bit of understanding of probability and statistics, and linear algebra, such as can be gained through institute courses should suffice.
- ML background, and finance courses help.
- Finance and ML projects (like time series modeling) on the resume are major plus points. Good to show through projects that you have mastered the courses you learned.
- A summer internship in coding, ML, or finance helps.
- PORs not majorly considered for the role.
- Be truthful, consistent, and confident in the interview.
- Inculcate company values in HR answers.
- Take your time and think properly before answering interview technical questions.
- Project strong technical knowledge in coding, ML, slight passion for finance, and an intent to learn.
- In general, for internships, be open to all profiles and prepare well.

Preparation Material:

- Solving DSA problems on sites like Leetcode, and Hackerrank.
- MA2040 is enough for the probability and statistics theory part. Also prepared from a book called 'Heard on the Street'.
- PRML course can help provide possible ML background for the role.
- Courses on Coursera like financial markets, Stanford DSA course.
- Puzzles and probability questions on Brainstellar.
- MA2020 revision for linear algebra.
- CS5691 course helps, normal regression algorithms question was asked.

Open for:

- Btech: All
- Dual Degree: All
- Mtech: All
- IDDD: Advanced Materials and Nanotechnology, Bio-Medical Engineering, Computational Engineering, Data Science, Robotics, Quantum Science and Technology, Tech MBA

Stipend: 75000 Monthly

Link To Video Fundaes:

<https://drive.google.com/file/d/1o52d0TyWCOTK5lVJdO8BOPZ7VPDPXceW/view?usp=drivesdk>

DE Shaw

Profile : Software Engineering

The D. E. Shaw group is trusted by investors across the world to manage their assets by seeking the optimal balance of risk and reward. While we're known as a pioneer in quantitative investing, we also have considerable expertise in areas that involve fundamental analysis or portfolio manager discretion. We use a combination of quantitative and qualitative tools to uncover independent, hard-to-find sources of return across global public and private markets.

Founded in 1988 over a small bookstore in downtown New York City, the D. E. Shaw group began with six employees and \$28 million in capital and quickly became a pioneer in computational finance. In the early days of exposed pipes and extension cords, tripping on a cable could take out our whole trading system. Today, the firm has more than 1,900 people around the globe and an institutional-grade (and trip-proof) infrastructure, but we still value creativity, entrepreneurship, and the spirit of discovery.

This profile and any links posted through this profile (together, the "Content") are provided for your information only and do not convey investment advice or an offer of any type with respect to any securities or other financial products. The D. E. Shaw group does not endorse any information or beliefs discussed in any links posted through this profile and makes no representation as to the accuracy or adequacy of the Content. The Content has not been updated for any information that may have changed since publication. No assurances can be given that any aims, assumptions, or expectations expressed or implied in the Content were or will be realized, or that the activities described have continued or will continue at all or in the same manner as described

Job Description

Internship Exposure:

- Gaining insights into financial domain
- Acquiring end-to-end understanding at trading systems workflow and building core trading system components
- Working on transformative tools, enhancing data analysis libraner and building data visualization platforms
- Designing and implementing scalable, real-time software

What we're looking for

- The ideal candidate should be a pre-final year student with a minimum CGPA of 7.00 in Computer Science branches and 8.00 in all other branches with no current backlog
- Their programming skills in C/C++/java/Python should be proficient They should have practical understanding of CS concepts in the following areas:
 - Data Structures and algorithm
 - Operating Systems
 - Computer networks
 - Database management systems
- Problem-solving and logical reasoning abilities are important for this role

Shortlisting Process: Test Online -1 : 35 Hr[s], Resume Shortlisting

CGPA Cutoff : NA

Test :

Mainly focussed on DSA and OOPs.

3 coding questions were asked and there were separate time limits for each question.(2 questions from dynamic programming)

GD: NA

No of interview rounds - 2

Interview:

Round 1:

- OOP (virtual functions,virtual pointer,virtual table)
- 1 qstn based on stacks
- 1 qstn based on heaps

Round 2:

- HR questions from Resume
- Write a class for a ludo game

Suggestions:

- Think out loud during interview
- Don't mention something you are not confident in your resume

Preparation Material:

- Geeks for Geeks Interview questions
- CS2810 helped in OOPs

Open for:

- Btech: All
- Dual Degree:All
- IDDD: * Advanced Materials and Nanotechnology
 - * Bio-Medical Engineering
 - * Computational Engineering
 - * Data Science
 - * Robotics
 - * Quantum Science and Technology
 - * Tech MBA

Stipend: 200000 Monthly

Link To Video Fundaes:

https://drive.google.com/drive/folders/1iYbOXtgNOQplz6V4KMA5i8Q-84wK_3E9?usp=sharing

Dr Reddys Laboratories

Profile: Core

About Dr. Reddy's Laboratories

Dr. Reddy's Laboratories is an Indian multinational pharmaceutical company located in Hyderabad, Telangana, India. Dr. Reddy's manufactures and markets a wide range of pharmaceuticals in India and overseas. The company has over 190 medications, and 60 active pharmaceutical ingredients (APIs) for drug manufacture, diagnostic kits, critical care, and biotechnology products.

Job Description

Technical training at manufacturing or an R&D site

Shortlisting Process: Resume shortlist, Test, GD, Interview

CGPA Cutoff: NIL

Test: Yes

Basic JEE chemistry questions, there were questions on Arrhenius equations, Ideal gas equation questions, Significance of dimensionless numbers, thermodynamics (first law related graph question) and in aptitude mirror questions, direction based questions

GD: Yes

Topics discussed: Process/Engineering of a drug applied on the skin and it's propagation properties of skin cream and factors which can affect its performance

Number of people in Group discussion : More than 5

Company's expectation: They were not looking for an exact answer but approach is what matters. Presenting yourself in a group and following the group's points and putting your thoughts in the discussion. Understanding on what factors affect certain chemical processes and how to control them

No of interview rounds - 1 (Technical Round) + 1 (HR Round)

Interview:

Round 1:

- Questions based on basic concepts from core courses
- Topics on your projects (if any) and fluid mechanics questions, basic thermodynamic principles
- In the case of pseudoplastic fluids, what will be the value of 'n' in the power-law model

Round 2 (HR Round):

- Personality based questions along with example through real-life application scenarios
- Strengths and weaknesses along with a suitable example of application in your professional life
- Asked about points from resume

Suggestions:

- Be a good communicator and ask questions without hesitation. Don't panic when they are asking questions, just skip the question if you are not comfortable with the question
- Do not mention anything in your resume you are not sure about or well versed in

Preparation Material:

The material provided on the internship drive

Open for

- Btech: Chemical Engg, Mechanical Engg
- Dual Degree: Chemical Engg, Mechanical Engg

Stipend: 40000 Monthly

Link To Video Fundaes:

<https://drive.google.com/file/d/1cN2KGzQ-v7jx98vRtDM769sKzWxatq3X/view?usp=sharing>

Emaar Properties

Emaar Properties

Profile: Core

About Emaar Properties

“Every single member of our organization adds a great value. Emaar is not a collection of talented individuals, but a team of great pooled talent.” – Mohamed Alabbar

Emaar Properties is one of the world’s most valuable and admired real estate development companies. With proven competencies in properties, shopping malls & retail and hospitality & leisure, Emaar shapes new lifestyles with a focus on design excellence, build quality and timely delivery.

Emaar Properties is a diversified business including real estate, malls, hospitality as well as entertainment. We also operate internationally. Emaar’s mall assets include, to name a few, The Dubai Mall, Burj Khalifa - the world’s tallest building and a global icon that pushes the frontiers in design, architecture, and construction, The Dubai Opera, etc.

At Emaar, our DNA lays the foundation for everything we do. It forms the base of how we serve our customers, how we speak with one another, and the way we move forward in every decision we make. In short, it is the essence of who we are and how we communicate.

Customer Focus

Customers are our number one priority. We take pride in delivering on our promises and above all we value the trust they place in us to deliver flawless products, services and experiences.

Ownership Mindset

No detail is too small, no challenge is too big and no ambition is too great. We drive efficiency and effectiveness into every corner of our business, so we are fit for the future and to compete.

Fast-Paced

Speed is everything in business. We evolve and adapt quickly and have the willpower, skills, knowledge, and passion needed to deliver extraordinary speed for our customers.

Talent and Tenacity

Our people are heroes, superhumans, and warriors. We are a team of great pooled talent that dream big and act quickly, with high energy and positivity.

Adaptability

We keep up with the times, disrupting and challenging the status quo. We challenge conventional wisdom and ourselves, we expect the unexpected, and we develop products and services that reflect the future.

Job Description

- Understands the overall concept of the company, including the brand, customer, product goals, and all other aspects of service.
- Manages business as usual tasks assigned by direct line manager.
- Provide periodic updates on business as usual tasks on completion status
- Accept designated, business-focus projects to research, and propose ideas and solutions.
- Engage in the Internship project and present the final project during the internship.
- Engages with Emaar colleagues to assist in the use of business IT systems.
- Manages learning requirements as provided by L&D during the Internship program

Upon successful completion of the Internship with an excellent evaluation of performance, you may be offered a full-time position in the same department post end of your degree.

Departments that are offered for Interns include, but are not limited to:

- Development Projects
- Structural Engineering
- Commercial Leasing
- Revenue management
- IT
- Finance
- People and Performance

- Asset Management

QUALIFICATIONS, EXPERIENCE & SKILLS

Minimum Qualifications:

- Bachelor's Degree or Master's Degree
- In the final or penultimate year of Degree
- GPA of at least 8/10
- Disciplines: CSE, ECE/EEE, Mechanical, Civil, Chemical, Engg. Physics and other relevant disciplines

Job-Specific Knowledge & Skills:

- Previous Internship experience will be an add-on

BENEFITS

- Flights, Accommodation, Visa provided by Emaar
- Lunch Meal Coupons provided by Emaar
- Monthly stipend of 5000 AED per month
- Travel to/from office provided by Emaar

Shortlisting Process: Resume shortlisting, test, interview

CGPA Cutoff: 8

Test: Aptitude, Verbal skills, and error analysis

GD: No

No of interview rounds - 2

(the next three sections are based on responses of someone shortlisted for the data science role)

Interview:

Round 1:

- Technical

- Questions were mostly related to the projects done and the technical aspects of it and the points mentioned in the resume.
- Sample question: “What are the difficulties you faced while working in a group for a project. How will you implement the project you have done in our company.”

Round 2:

- HR

Suggestions:

- Having good ML projects under IITM professors helped.
- Skills in machine learning and the way answers are presented matter.

Open for:

- BTech: All
- Dual Degree*: All
- IDDD: All
- Mtech: All

Stipend: 5000 AED Monthly

FinMechanics

Profile : Finance

About FinMechanics :

FinMechanics provides consulting services to and builds applications/tools for Treasury, Capital Markets and Risk departments of banks and financial institutions. We work on all the areas of a bank's treasury starting from pricing tools, market data management, trading and order management capabilities, risk management, trade processing, settlement, and accounting systems. In the Enterprise Risk space, our Subject Matter Experts help risk departments evaluate Value at Risk, perform Asset Liability Management, and set up Limit Monitoring frameworks for market, credit, and trading risks. In the consulting space, we provide an exhaustive range of services on leading Treasury solutions like Numerix, Murex, Kondor+, Calypso, etc. In the last 11 years, we have worked with Global and Regional Banks in Asia-Pacific and UAE.

Job Description :

Finance Intern, Summer 2022 (Mumbai)

- The internship programme at FinMechanics will involve consulting as well as creating solutions for capital markets, treasury and risk departments of financial institutions.
- The internship projects will involve understanding the functional & business requirements and create solutions using mathematics, finance concepts, computing, and technology skills. The exact details of the project will be communicated before the start of the internship.

Shortlisting Process: Resume Shortlist, Test, Interview

CGPA Cutoff: NA

Test:

- 4 sections (Finance, Probability/Logic, Coding, HR).

- Around 2 hours long.
- Probability was a major part (roughly half the test).
- No prior finance knowledge was required (Questions were comprehension-based).
- HR part of the test was majorly from the PPT.
- The coding part was quite minimal and basic

GD: NA

No of interview rounds - 2

Interview:

Round 1:

- Technical
- Test coding fundamentals (OOPs, DSA)
- Probability questions also asked

Round 2:

- HR Round
- Questions from test also repeat
- They check if you are a good fit

Suggestions:

- They look for a strong grasp on probability and logical reasoning. Be sure to brush up on these concepts along with basic coding (OOPs, DSA)
- Mock tests will help you gauge your speed for their test
- Pay attention to the PPT since the HR part of the test was directly from the PPT.
- Stick to your answers in the test (HR) as these questions will be repeated in the HR part, have a clear approach for the technical questions and verbalize it well.
- Don't contradict yourself

Preparation Material:

- Heard on the Street (book)
- 50 Problems in Probability (book)
- Websites like leetcode etc to prepare for the coding part

Open for:

- Btech: All
- Dual Degree:
 - Aerospace Engg
 - Biotechnology
 - Chemical Engg
 - Civil Engg
 - Computer Science & Engg
 - Engineering Design
 - Electrical Engg
 - Mechanical Engg
 - Metallurgical & Materials Engg.
 - Ocean Engg.
 - Physics
- IDDD :
 - Advanced Materials and Nanotechnology
 - Bio-Medical Engineering
 - Computational Engineering
 - Data Science
 - Robotics
 - Quantum Science and Technology

Stipend:130000 Monthly

Link To Video Fundaes:

<https://drive.google.com/file/d/1OmdEDwPSPPO7WUYCZmKGMe-TiuPfYNes/view?usp=sharing>

Goldman Sachs

Profile: Quantitative and Technical Engineers

About :

The Goldman Sachs Group, Inc. is a leading global investment banking, securities and investment management firm that provides a wide range of financial services to a substantial and diversified client base that includes corporations, financial institutions, governments and individuals. Founded in 1869, the firm is headquartered in New York and maintains offices in all major financial centers around the world.

Job Description

Our quantitative & technical engineers are at the cutting edge of our business, solving real-world problems through a variety of analytical methods. Working in close collaboration with bankers, traders and portfolio managers across the firm, their invaluable quantitative perspectives on complex financial and technical challenges power our business decisions.

As a member of our team, you will use your advanced training in mathematics, programming and logical thinking to construct quantitative models that drive our success in global financial markets. Your talents for research, analysis and aptitude for innovation will define your contributions and enable you to find solutions to a broad range of problems, in a dynamic, fast-paced environment.

Whatever your background, you will bring a fresh perspective and unique skill set to our business. In return, you will be trained by our experts across the firm to navigate the complexities of the financial markets and state-of-the-art methods in quantitative finance. An ordinary day is anything but. You may work on alpha-generating strategies; discuss portfolio allocation problems; and build models for prediction, pricing, trading automation, data analysis, and more. Whichever your area of contribution, your ideas will have a measurable effect on our business and on our clients.

Candidates would be required to work on a wide range of problems, including the following:
Developing and validating quantitative models used:

1) to calculate the fair value of financial contracts (securities and derivatives);
2) to measure, analyze and manage the risks in our businesses (market, counterparty credit, operational, funding, and liquidity risks as well as legal, regulatory, and reputational risks);
3) to execute trades and make markets electronically in equity and fixed income products; and
4) to create trading strategies, portfolio analytics, and risk management tools for the firm's mutual funds, hedge funds, and private wealth, clients. Designing and developing sophisticated software and systems using proprietary as well as modern web, mobile, and, desktop technologies:

1) to manage, visualize, and analyze massive sets of the market and operational data used in our trading, risk management, and control functions
2) to correctly and efficiently route orders for billions of dollars of securities every day;
3) to allow the ability to represent, transact in, and risk management all of the firm's OTC derivative positions; and
4) to distribute computations across tens of thousands of computers.
5) to make use of functional programming paradigm and big data solutions to develop firm's next generation modeling, pricing, and risk management platform
6) to contribute to key open source initiatives – e.g. GS Collections, Project Panama
7) to build firm's strategic mobile platform.

Shortlisting Process: Test, Interview

CGPA Cutoff : Might be 8.0/8.5

No. of offers: 20

Test :

- 3 sections: Easy Coding, Advanced Coding, Probability + Quant sections, HR, Coding MCQs section
- Easy coding section: 15 mins for each question (2 qns)
- Advanced coding section: 45 mins for each question (1 qn)
- Probability: 8 qns
- HR: 2 qns

GD: NA

No of interview rounds - 2 or 3 or 4 rounds (Has both HR and Technical questions)

Interview:

Round 1: 1st Tech round

- A good “Tell me about yourself”
- About projects in the resume
- They will ask which part of the job you are interested in: Quant or Software
- For software: Eg questions -
 - How to reverse a linked list
 - If you have a sorted array, how would you find a solution such that sum of the 2 elements is a particular number, in the least time possible? (Hint: you can find it in $O(n)$)
 - Array is given: take the i 'th element of the array - find product of all elements except for the i 'th element.
 - Rabbit can take 1 or 2 steps at a time. The rabbit has to finally take 100 steps. What is the number of ways this can be done? (Hint: Recursion + Fibonacci sequence)
 - Questions about trees, dynamic programming and linked lists.
- Probability questions
 - If you have a coin, how would you find the value of π ? (common question)
 - Questions on continuous random variables, regression, etc. (in case you are targeting the quant role, it is important to do probability related questions)

Round 2:

- For software: Eg questions -
 - Take Google sheets, labeling goes from A-Z and then AA, BB, CC, etc. How would you make sure that if you input '26' it should print 'Z' and if you input '27' it should print 'AA'. Since the base of the labeling is '26', they asked how you would shift it to a different base, let's say base '27', kind of labeling.
 - Questions on polymorphism
- HR puzzles

Round 3:

- It depends on what you would like to be asked. Quant or Coding
- For coding: they give you a hackerrank console and ask you to code with it.
 - How would you find square root of a number? (you can use sqrt function, etc)
 - Recursion problems

Suggestions:

- Started prep on: Mid of June/Start of July, prepared for software engineering, data analytics. Could have started earlier.

- Learn how to drive the interview around: You can clearly mention if you are into the topic that they are probing you about and ask them to shift towards what you are interested in.
- Express your approach to the solutions in the interview (practice thinking out loud)
- Have a decent “Walk me through your resume” ready.
- Do a bit of research about the company. At the end, have a question/questions ready for the interviewer.
- Don't panic if you don't get called for rounds. The number of interview rounds don't matter. They usually have extra rounds for some people.
- Try setting a rapport with the interviewer. You get to know who the interviewer is a few minutes prior to the interview, so you can scroll through their linkedin profile to interact with them more.

Preparation Material:

- Theory and practice: leetcode, hackerrank + YouTube (a lot of DSA related videos)
- Brainstellar: for Quant preparation
- Institute Drive for probability
- 50 challenging problems in probability
- More important to manage time for the test. A lot of simple questions.
- Probability: Heard on the street
- Probability course through NPTEL or MA department from the institute
- 64 HR questions for HR questions
- Foobar for DSA. Manage time properly. Trees and Graphs is very important for GS test.
- If you haven't done a course on DSA:
<https://www.coursera.org/specializations/algorithms>
- Codechef+Codeforces
- Depth of Machine Learning: Not necessary to learn unless you put it in your CV. You may brush up a little on Linear Algebra which might help during interviews.
- Free to use any coding language: GS has their own coding language and they build their software on this language. Their portal for the test provides a wide array of languages to work on.

Open for:

- Btech: All
- Dual Degree: All

- IDDD: All

Stipend: INR 150000 monthly

Google India

Profile: Software Engineering

About Google India

Engineering & Operations Google is and always will be an engineering company. We hire people with a broad set of technical skills who are ready to tackle some of technology's greatest challenges and make an impact on millions, if not billions, of users. At Google, engineers not only revolutionize search, they routinely work on massive scalability and storage solutions, large-scale applications, and entirely new platforms for developers around the world. From AdWords to Chrome, Android to YouTube, Social to Local, Google engineers are changing the world one technological achievement after another.

Job Description:

Software Engineering Intern, Summer 2022 (Bangalore or Hyderabad)

Software Engineering interns at Google are researchers and developers who yearn to create and implement complex computer science solutions. Our engineers develop massively scalable, distributed software systems and also collaborate on multitudes of smaller projects that have universal appeal - which requires research, awareness, interactivity, and asking questions. You build strong competencies in data structures and algorithms, along with a technical fascination for how stuff fits together. You need to have a solid foundation in computer science in order to consistently come up with new ideas as well as strive for a deep understanding of our products and services in order to continually improve upon them. We focus on being a collaborative, global organization consisting of engineers with the highest levels of technical depth, programming skills, and a keen eye for quality.

As a Software Engineer Intern, you will work on our core products and services as well as those that support critical functions of our engineering operations. **Depending on your background and experience, you will be working in one of the following areas:**

- **Product and Systems Development:** Whether it's finding new and innovative ways to advance search quality, building computing platforms and networking technologies, automating the indexing of videos, or continuing to refine and scale complex auction systems (just to name a few), you will be developing solutions to some of the most challenging technical problems out there. You will research, conceive and develop software applications to extend and improve on Google's product offerings and collaborate on scalability issues involving access to massive amounts of data and information.

Examples of specialist domains: UI development with AJAX and similar technologies, security, embedded systems and mobile apps (Android), and developer tools (IDEs, large-scale build systems, compilers).

- **Engineering Productivity:** In this organization, you'll use your software design, analysis, and programming skills to create innovative automated test systems. This isn't a job in which you'll simply debug and run test cases, in fact, that only scratches the surface. The test team undertakes a broad range of challenges on a daily basis, designing and building intelligent systems that can explore various use cases and scenarios for distributed computing infrastructure. Just imagine trying to design and build an automated testing system for something that's never been done before. There are no textbooks that can help you learn this, which is why we have some of the best and brightest engineers working in this group.

Responsibilities: Specific responsibilities vary by project area.

Minimum qualifications: Currently pursuing a BTech/Dual course in computer science or a related technical field & in their penultimate year of study, with an anticipated graduation date in 2023 (Btech) or 2023/2024/(Dual).

Preferred qualifications: Must be currently enrolled in a full time degree program and returning to the program after the completion of the internship Experience in systems software or algorithms. Excellent implementation skills (C++, Java, Python). Knowledge of Unix/Linux or Windows environments and APIs. Familiarity with TCP/IP and network programming.

Shortlisting Process:

Resume and Test Shortlist followed by interviews (2 rounds)

CGPA cut-off: NA

Test :

- Duration - 1 hour, 2 questions (based on DSA)
- Getting one correct usually highlights your name for the company
- Platform used was HackerEarth

GD: None

No of interview rounds - 2

Interview:

Round 1:

- Technical - 2 questions
- Based on DSA, DP, Graph Theory

Round 2:

- Technical - 2 questions
- DSA
- Questions from both rounds easier than test's questions

NO HR ROUND

Suggestions:

- You have to be very well versed with DSA, Graph Theory.
- Practice coding in a Google Doc, as that is what you will be using for the interviews.
- Work with previously asked internship interview questions by Google in forums at various websites like codeforces, etc.
- Since it is Google, ranks or achievements in Kickstart/Codejam are of value.
- Start simple, then try to optimize your solution. Don't be afraid to ask for help, communication is a key quality they look for.

Preparation Material:

- Competitive Coding - leetcode, codechef, codeforces etc
- DSA and Graph Theory - GFG/other online courses
- Good knowledge of time/space complexity is appreciated

Open for:

- Btech:
 - Computer Science & Engg
 - Electrical Engg
- Dual Degree:
 - Computer Science & Engg
 - Electrical Engg

Stipend:110000 Monthly

Link To Video Fundaes:

https://drive.google.com/file/d/1rW-q_hhgCIPbzDnkz1lM714kbD0UUr6H/view?usp=sharing

Huawei Technologies

Profile: Software developer/ Intern

About Huawei Technologies India Private Limited

Job Description

1) Consumer Business Service Competence Center

Huawei's vision is to bring digital to every person, home, and organization for a fully connected, intelligent world. Do you want to work on the latest technologies and be a part of the team that is working on state of the art project and an opportunity to work in the new field of innovation connected to the ICT domain (AI/ML/DL, NLP, Computer Vision, Database Enterprise, Mobile Handset, Cloud, Open source,)

We are looking for technology enthusiasts who are smart, passionate, out of the box thinkers and ready to take technology to the next level.

Are you willing to learn from others and open to new ideas? Do you want to support others to succeed and operate in a highly collaborative and global environment? If this sounds like you, Huawei R&D would like to invite you to intern with us, where you can find exciting and challenging work waiting. Read on to learn more about opportunities in our teams.

Huawei Consumer Business Group is growing at an extremely fast-pace and currently we are among the top 2 smartphone makers. We believe in creating a great user experience, quality products for our consumers, and generating a high level of trust and confidence in our services. Huawei Mobile Services (part of Consumer Business Group) provides Huawei device users a range of full-scenario and high-quality intelligent experiences in smart home, health and fitness, mobile office, easy travel, and entertainment. As of 2020 Q1, the active number of Global Huawei Mobile Services users increased to 650 million users, an increase of 25% from

2019 Q1 and the registered developers increased to 1.4 million, up by 115% from what we had in 2019Q1.

Adhering to a consumer-centric philosophy, Huawei Mobile Services together with global outstanding partners and developers will innovate and constantly explore the future of our better digital world!

3.1) Big Data Search Team

Working on cutting edge areas of AI/ML/DL to generate new fields of innovation related to Consumer Cloud Services including Mobile devices, Hand-Held devices, Computers in the domain of Advertisement Serving, Search, Recommender systems, Security, Payment and various consumer-facing applications. Technical Planning and collaboration team focuses on research and cooperation projects with Professors on the latest research in areas of NLP, KG, CV, ASR/TTS, Contextual Bandits/Causal inferencing, Active learning, Smart Creative, Multimodal Creatives, Intelligent troubleshooting, AIOps and do POC of some of latest research happening projects

Project Scope

There are many research projects running in Key areas of Data augmentation, active learning, auto labeling, Knowledge discovery, Knowledge integration, cross-language KG entity linking and alignment, Personalized Recommendation based on context, Query intent understanding system, Code mixed, code switch, transliterated NLP are to name a few.

Responsibilities

As an intern, you will be part of one of the running or new research projects which may require you to investigate new research papers, generate possible ideas and execute POC or execute some key part of work with professors available to you in the span of 3 months. Some of these may lead to patentable ideas

Qualification

B.Tech in Computer Science, Electrical Engineering with exposure to AI/ML/DL

3.2) Open Platform Team

Huawei Ads Services is a comprehensive multi-channel Ad platform targeting Mobile, PC, TV, and Personal Devices. Huawei Ads Services is dedicated to providing Huawei end-users with high-quality digital experiences. We are building DSP, SSP, Ad Exchange, Ad Network, DMP,

and Ad Creative platforms. AI-Driven is the direction of Ads, and Huawei is building a strong team in India. Would like to take a challenging problem in this space and provide a state-of-the-art solution? Please come and join us!

Project Scope

We are developing the state-of-the-art Micro service-based Ad Creative platform using the latest AI/CV/ML/DL /Graphics algorithms. Ad Performance Analytics using Deep Learning & Big Data technology. This team will focus on developing/enhancing the state-of-the-art CV/DL algorithms to improve the Image quality, Generate Context-based Hyper Relevance images, Video, and Native and Immersive Ads. Analyze and Predict the Ad Performance, Ad Optimization, Ad Attributions, etc.

Responsibilities

We are looking for candidates to take on some of the challenges in this area and come out with innovative solutions using AI/CV/ML/DL algorithms

Qualification

B.Tech In Computer Science with subjects in AI/CV/ML/DL. Strong problem solving, Analytics, and Algorithm knowledge with C++/Python/Java programming experience

3.3) SRE Team

The SRE Team of Huawei Mobile Services in India R&D center, Bangalore, is responsible for building various Large scale platform capabilities such as auto-deployment, auto-health check, capacity management, auto-scaling, auto fault detection/analysis/recovery, multiple-active region datacenters, etc. handling Million+ servers and 120+ services for the users across 170+ countries.

We are innovating towards an intelligent platform that can handle the massive scale cloud service infrastructure reaching the No Ops framework.

Project Scope

Development of a framework to create, migrate and manage a hyper scale hybrid cloud platform with a service-oriented architecture with auto-scaling, optimal resource scheduling, life cycle management, etc.

Develop strategy and market analysis report for futuristic technologies development to enhance our existing platform.

Architect an intelligent ops governance framework to manage a hyper scale PAAS/SAAS platform in a “No ops” scenario including auto Instrumentation, Auto Remediation, Auto RCA,

Anomaly detection, chaos engineering, auto job scheduling, Auto managing Multi-regional Datacentres.

Develop strategy and market analysis report for futuristic technologies development to enhance our existing platform.

Responsibility

Will be given responsibility to develop one or more of the features such as auto-deployment, auto-health check, capacity management, auto-scaling, auto fault detection, analysis, recovery automated ops/SRE/DevOps/IAC process implementation.

Will be given responsibility to output deliverables in one or some of the work covering research and development of algorithms, frameworks, Processes, Technology standards, protocols, stack design, etc.

Qualification

B.Tech in Computer science, Distributed hybrid cloud computing, Distributed service/application development, Service-oriented architecture, intelligent resource creation, scheduling, Automation framework, AIOPS, Cloud stack instrumentation, AI/ML-driven analytics of Application and cloud infrastructure platforms, etc.

3.4) SOC TEAM

Job Responsibilities

1. Attack pattern and attacker behavior analysis
2. Develop a detection model.
3. Develop policy in WAF to prevent attacks.
4. Monitor and prevent events with Response and recovery process

Professional Knowledge

1. Good understanding of security attack concepts Splunk uses, attack analysis, attacker pattern identification using Splunk queries and attacker behavior analysis.
2. Nsfocus WAF flow and architecture, including integration
3. Python, AI/ML, and regex knowledge

Service Skills

1. Quick Learner and understand security concepts deeply
2. Has knowledge of python and AI-ML models, which can be very useful for teams to build various detection models.

3.4) Base Cloud Development

We, from the Base Cloud Development Department of Huawei Consumer Cloud Service are responsible for building various core services of Huawei Mobile Services Eco System which are based on Huawei terminal cloud service that provides the ability of ecological openness like In-app purchases, Huawei Account and Elastic Search. We are responsible for end-to-end delivery of these services across 140+ countries (Europe, Latin America, Middle East, APAC regions) other than China. The Base Cloud Development team primarily focus on are Direct Carrier Billing of In-App Purchases, Account Management of Huawei Account and providing basic Query abilities to Content Management Systems like Video, Music on top of Elastic Search.

Job Description:

We are looking for experienced, creative, passionate, and motivated Advisory/Senior engineers for building Huawei Cloud-based SaaS applications. In this role, engineers own key modules and would be responsible for designing, developing, delivering and also debugging issues reported from the site. Needless to say, the role gives ample opportunities to explore and implement innovative and efficient solutions.

Responsibilities:

- Experience developing and delivering highly engaging front-end solutions using Agile methodologies
- Design components, develop code, and test changes utilizing development best practices such as test-driven development, pair programming, and peer review.
- Work on building an automated build pipeline, continuous integration, and continuous deployment and test automation frameworks with tools such as Git/Stash and Jenkins
- Develop close working relationships with members of teams within the organization.
- Design technology solutions that are capable of integrating with a variety of protocols (e.g. Rest, File Transfer)
- Follow Boy Scout principle, identify and improvise the module and make it more reliable, efficient and robust.
- Understand and work closely with business and technical stakeholders to meet business requirements and expectations.
- Write efficient, clean, and maintainable Java Script/Vue JS/AJAX code.
- Develop a deep understanding and implement security and data protection.
- Drive and implement the best practices in unit testing.
- Actively conduct and participate in code review meetings, test and design discussions.

Shortlisting Process: Resume shortlisting, test, interview

CGPA Cutoff : 10th, 12th, B.Tech last semester 70% / 7 CGPA & Above

Test : Aptitude Test : Yes - Online - 00 : 45 Hr[s]
Technical Test : Yes - Online - 00 : 45 Hr[s]
Test Requirements : Language Proficiency C, C++, Java

GD: No

No of interview rounds - 2

Interview:

Round 1:

- Technical
- All technical points in the resume might be discussed. Make a good introduction about yourself. It mostly depends on that. In the introduction stress on the points you are most confident about and want to take their attention to like internships and projects. Be honest about what you know. The interviewer also asked some riddles.

Round 2:

- HR
- Again starting with your introduction. Not to mention anything technical. Just mentioned about learnings through PORs etc. Even in this case also take their attention to the PORs and internship experiences through your introduction. Can tell them how you learned teamwork and gained the capability of managing time, people, and work.

Suggestions:

- Test tested DSA, programming languages, Logical reasoning, verbal ability, Quantitative aptitude
- The interviewer helps so make use of that.
- Learn python if you haven't already. If you have knowledge of any other language then python is easy. Python in particular is useful for ML roles.
- Learning SQL will be fruitful.
- Having knowledge of DSA concepts is helpful during interviews.
- Most important, prepare your resume carefully and be thorough with whatever you have written in it.
- Projects are good points on the resume. Practical knowledge is of utmost significance.
- What they look for: "Having technical know-how is one aspect. Being able to put it together beautifully and communicating it clearly is crucial. That will set you apart

because even during the job or internship you need to be able to clearly explain what you did and what trouble you are facing. Honesty. Keen to learn."

Preparation Material:

- Websites for coding practise like Hackerrank, Hackerearth, Leetcode, Interviewbit. Make yourself familiar with the questions and the interface of these websites. As most companies use the same platforms to conduct tests.

Open for:

- BTech: Computer Science & Engg, Electrical Engg
- Dual Degree*: Computer Science & Engg, Electrical Engg
- IDDD: Data Science

Stipend:100000 Monthly

Huawei Technologies

Profile: Software engineering

About Huawei Technologies India Private Limited

Job Description

Technology is dramatically transforming people's work and life now. Huawei's vision is to bring digital to every person, home, and organization for a fully connected, intelligent world. Do you want to work on the latest technologies and be a part of the team that is working on state of the art project and an opportunity to work in the new field of innovation connected to the ICT domain (AI/ML/DL, NLP, Computer Vision, Database Enterprise, Mobile Handset, Cloud, Open source,)

We are looking at technology enthusiasts who are smart, passionate, out of the box thinkers and ready to take technology to the next level

Are you willing to learn from others and open to new ideas? Do you want to support others to succeed and operate in a highly collaborative and global environment? If this sounds like you, Huawei R&D would like to invite you to intern with us, where you can find exciting and challenging work waiting. Read on to learn more about opportunities in our teams

1) Consumer Software Business:

Huawei is developing its own OS, Harmony OS targeted for all Devices (Mini IOT to High-End Smart Phones). Harmony OS supports the 1+8+N Strategy. 1 means Mobile, +8 Indicates Other devices manufactured by Huawei (Smart Watch, Smart Screen, IP Camera, Bluetooth Speaker, Tab...), and + N indicates Other IoT Devices across Domains like Video Entertainment, SMART Home, Health, etc. OS also especially focuses on Car Infotainment, and Dashboard.. The key USP of SMART Harmony OS is the seamless interconnection of All Devices providing a range of Valuable Services for Consumers. Harmony OS is completely Open Source Software,

Open Source Is the future of Software Eco systems and India is the fastest-growing Open Source developer market.

Opportunity & Project Scope:

- Students can learn about Open Source, Its importance in Industry, and Contribute to Open Source Development. Contribution to Open Source projects at an early stage of a career is highly Valuable for the person's Career and Growth.
- Application Innovation for 1+8+N ecosystem with emerging distributed Intelligent OS - Harmony OS.
- A Chance to work in Seamless Device InterConnection of User Scenarios which will be the next revolution in the world of SMART Gadgets.
- Contribute to World Class Multimedia Framework in Highly Intelligent Distributed Harmony OS.

Preferred Skills:

- Good in JavaScript, Java
- Having Passion for Technology, SMART Phone Application Framework, OS Open Source, and Multimedia Framework Development.
- Any knowledge on Android/Flutter is appreciated.

Shortlisting Process: Resume shortlisting, test, interview

CGPA Cutoff: 10th, 12th, B.Tech last semester 70% / 7 CGPA & Above

Test: Aptitude Test: Yes - Online - 00: 45 Hr[s]

Technical Test: Yes - Online - 00: 45 Hr[s]

Test Requirements: Language Proficiency C, C++, Java

GD: No

No of interview rounds - 1

Interview:

Round 1:

- There were coding questions, one or two theoretical questions about OOP and DSA, and two aptitude questions. Another candidate has 2-3 coding questions.
- Example of question asked: Find the number of 1's in the binary form of a given integer

Suggestions:

- Practice coding and learn data structures & algorithms, OOPs.
- Have web development projects on resume.
- They look at problem-solving skills and practical experience through projects.
- Always explain your thought process while coding.

Preparation Material:

- Practise coding on Hackerrank, Leetcode, Codeforces, geeksforgeeks.

Open for:

- BTech: Computer Science & Engg, Electrical Engg
- Dual Degree: Computer Science & Engg, Electrical Engg
- IDDD: Data Science

Stipend:100000 Monthly

Hindustan Unilever Limited

Profile: Supply Chain & R&D

About Hindustan Unilever Limited

HUL is one of the leading companies in the FMCG sector in India and abroad. It manufactures products in segments like consumer care, home care and beauty products.

Job Description

An internship at Hindustan Unilever Limited under Unilever Leadership Internship Programme is an enriching and challenging experience. Interns get an opportunity to work on exciting live projects, with clear deliverables and identified targets. These projects are of critical importance to the specific business and interns will be expected to apply their technical knowledge to the tasks at hand. In the process, they shall develop a business perspective while getting hands-on experience. During the internship, they will be assigned a tutor, buddy and mentor who will guide them throughout the stint and help in building a larger functional and business perspective.

Students can apply for an 8-week internship at the end of which, they may receive a pre-placement offer based on their performance and fit with Unilever. If offered a placement, they will join us as a Management Trainee under the Unilever Future Leaders Programme in 2023.

Shortlisting Process: Resume shortlist, Test, Interview

CGPA Cutoff: NIL

Test: Yes

The test was an interview(with both video and audio on) based on pre recorded questions on the Hirevue software. Given a question about which one has 1 minute to think about and 5 mins to record response about that. There were 3 such questions. Some small breaks could be taken in between the questions. Questions were like general questions on supply chain and case based questions.

Questions asked:

- 1) Suggest a way which the company can adopt to increase plastic recycling and collect the plastic packaging of its used products.
- 2) It was a case based question. Some data was given based on which the answer had to be given. Basically, the question was about choosing between an entirely new production system or an existing production system with additions to it. Based on the data and our own judgement the question was to be answered. Assumptions considered while answering the question were also asked.
- 3) Three relevant technologies for improving the supply chain and the parameters based on which the decision should be taken on choosing the technologies.

GD: No

No of interview rounds - 1 (Technical + HR)

Interview:

Round 1:

- The interview was almost fully technical. A favourite subject was asked and questions were based on that.
- Was asked about resume points such as industrial training.
- Students were asked to introduce themselves.
- Sample question: What an eutectic mixture is?
- Case based question on identifying a defect in a heat exchanger. The question was that there is a heat exchanger with inlet and outlet streams which is not able to perform well and the student was asked to identify the defect in that. The answer was something related to the changed compositions of the inlet stream.

- 5 sustainability practices which the student follows in his daily life.
- Tested technical knowledge as the interview was almost fully technical. They also evaluated his confidence and spontaneity.

Suggestions:

- The first level for HUL is just not a resume shortlist. They send us a form which we have to fill out in 2-3 days. It asks for basic details, info about internships, projects, PORs, etc., and also HR questions. So try to fill out that form with all efforts to the best of your ability as it is a deciding factor for selection.
- Try to remain calm, confident, and smiling throughout the interview. Even if you don't know the exact answer to the questions try to approach the answer and try to get near to it. Interviewers do help out in answering. You can also try to say some funny things to make the atmosphere lite if the interviewers appear friendly and informal.
- Know the points of your resume very well and a lot of questions can be asked from them.
- Try not to speak for too long at a time (in the introduction also) as interviewers can lose interest in the answers

Open for:

- Btech: Chemical Engg, Electrical Engg, Mechanical Engg
- Dual Degree: Chemical Engg, Electrical Engg, Mechanical Engg, Engineering Design

Stipend: 150000 Monthly

Link To Video Fundaes:

https://drive.google.com/file/d/1WXsLcEhQhmKtj3ew2NiZA2_58rOvbtQ8/view?usp=sharing

ITC Limited

Profile : Core

About ITC Limited

Job Description

ITC is a conglomerate with a major presence in tobacco, stationery, FMCG, etc. ITC invites the leaders of tomorrow to apply for KITES – ITC's Summer Internship program. We look forward to selecting students who aspire to intern with ITC's technology function. Knowledge, Initiative & Talent Excellence Series is ITC's Summer Internship Programme designed to provide tomorrow's leaders a unique platform to learn, experience, and manage real business situations. Indeed KITES is a one of its kind programme! You will be given an opportunity to experience the rigours of actual work/business scenarios, apply your theoretical learnings 'on the job' and gain precious insights into management, leadership and everyday challenges. In fact, KITES works both ways - while you get to intern with any of ITC's businesses and understand the core process of value-creation, we get re-energised by the host of new ideas, fresh perspectives and compelling observations that you bring to the table! Internships are offered for a period of 8 weeks, during the months of May and June each year. KITES is an extremely important platform that enables us to identify exceptional talent from the best of institutions in India, who have the potential to become the next generation of leaders at ITC. You will be awarded Pre Placement Offers of Employment based on your performance during the internship. At ITC, we view KITES (ITC's Summer Internship Programme) as the primary source of selecting talent to join the organization. Live and critical projects that flow from the business plan of the Division will be assigned to you. You will get to engage with the best-in-class systems and practices in the technology domain whilst being mentored regularly and reviewed periodically. Interns who deliver superior results present their recommendations

to the Management Committee of the Division and are offered PPOs. Successful interns are also given an opportunity to pilot their recommendations before the internship period is over. At ITC you will experience an exciting, invigorating and aggressively growing organisation that not only boasts of one of the largest distribution networks in the country, cutting edge technology, proven manufacturing and supply chain prowess, but also possesses a bouquet of indigenously developed world-class brands such as Sunfeast, Aashirvaad, Bingo!, Fiama Di Wills, Classmate, Yippee!, Mangaldeep, Vivel, Engage amongst others. To know more about careers at ITC please go to: www.facebook.com/itchubnscope
<http://www.itcportal.com/careers/index.aspx>

Shortlisting Process: Resume shortlisting, group discussion, interview

CGPA Cutoff : Nil

Test : Nil

GD: Yes

No of interview rounds - 2

Interview:

In terms of HR questions, definitely prepare to answer 'Why ITC?' and 'Tell me about yourself'.

Round 1:

- After preliminary GD.
- More technically oriented than round 2, with a focus on projects done, internships, and courses
- Examples of mech core questions: thermal questions like deriving the second law from Kelvin Planck to entropy and fluids mechanics questions.
- Examples of elec core questions: How does a refrigerator work, what are the components of a power triangle.
- Project-related questions like if it was some other scenario what would you have done for the same project.

Round 2:

- More HR-oriented, with discussion related to work done in our institute such as projects as well.
- Question: 'Will you be comfortable going to a remote place?', 'Can you manage different languages?', 'Why IIT?', 'Why your branch?', 'Describe an incident where you did something unique?', 'Why do you have a high CG?'

Suggestions:

- Resume preparation should ideally be done well in advance, giving a chance to review multiple times. The interviewer will pick points from your resume to connect with you. PORs primarily help answer situational questions.
- Core projects helped a lot, you can direct the interview in that direction.
- Reach out to seniors placed to get a better idea of how this internship will work.
- Brush up on core courses (especially the ones that are commonly covered in interviews) and prepare for HR (the book provided by the internship team).
- Good to have a core project on the resume.
- For an elec core candidate, elec machines questions were asked
- Maintain a friendly environment during the interview and make it conversational.
- Be thorough with whatever you put in your resume, especially whatever project you do.
- Be honest and confident in what you say and your style of saying it.
- Have some questions for them about the company to be asked in the end or even technical questions.
- Try aligning with ITC values, show dedication, and have clarity in basics.
- Fill out the KITES form properly.
- Do mock GDs, very helpful, don't wait for dates to start preparation.
- Do hr prep with a mock interviewer.
- In gd don't be arrogant, don't be submissive, and maintain a balance.
- For the internship process in general, sort out probables and backups in terms of companies to target.
- There is an online blog by ppl who got ITC, can check it out.

Preparation Material:

- Core revision of course material, at least one or two major topics.
- Book provided by the internship team for HR preparation.

Open for:

- BTech: Chemical Engg, Computer Science & Engg, Electrical Engg, Mechanical Engg
- Dual Degree*: Engineering Design, Mechanical Engg
- IDDD: Data Science

Stipend:150000 Monthly

Link To Video Fundaes:

https://drive.google.com/drive/folders/1Guz7e_2jESwhYFLDhEjo2LRjF7wUNCnv

J P Morgan

Profile: Global Markets

About JP Morgan

JPMorgan Chase & Co. is an American multinational investment bank and financial services holding company. As a "Bulge Bracket" bank, it is a major provider of various investment banking and financial services. It is one of America's Big Four banks, along with Bank of America, Citigroup, and Wells Fargo. JPMorgan Chase is considered to be a universal bank and a custodian bank. The J.P. Morgan brand is used by investment banking, asset management, private banking, private wealth management, and treasury services divisions.

In a fast-moving and increasingly complex global economy, our success depends on how faithfully we adhere to our core principles: delivering exceptional client service; acting with integrity and responsibility, and supporting the growth of our employees.

Job Description

The global market division of JP Morgan mainly works on structuring and pricing derivative products. This team will be handling the legal documents, and with that, you will be helping in the maintenance and creation of new assets. This team will be working on the financial parts of the company. You will be working in the sales support team so explaining the trade rationale behind the trades would be your job.

Shortlisting Process: Resume shortlist, Test, Interview

CGPA Cutoff: 7.5

Location: Mumbai

Test :

Yes

Aptitude test -online - 1 hr (English, Analytics, Logical Reasoning)

Technical test - online - 1 hr

GD: No

Interview:

No of interview rounds - 3

2 Technical rounds and 1 HR round

(questions based on - probability, statistics, puzzles, Finance- major part)

Suggestions:

- Make sure you don't panic when unknown finance terms are used in interviews, try to understand them and let them know your thought process about it
- Pay attention to small details
- Know your resume inside and out
- Coding will be a definitely a plus and having basic knowledge of coding is a must

Preparation Material:

- CAT Papers
- Prepleaf
- Probability - 50 Challenging Problems in Probability, Heard on the Street, Course work in Probability MA2040
- Day 1.0 Book - Quant and Probability questions, Finance fundamentals

No of offers - 3

Open for:

- Btech: All
- Dual Degree: All
- IDDD:

- * Advanced Materials and Nanotechnology
- * Bio-Medical Engineering
- * Computational Engineering
- * Data Science
- * Robotics
- * Quantum Science and Technology
- * Tech MBA

Stipend: INR 75000 Monthly

Link to Video Fundaes:

<https://drive.google.com/file/d/1G085Y9U5m67UWAn78mejLT4nmqp9DdW-/view?usp=sharing>

J P Morgan

Profile: Quantitative Research

About JP Morgan

JPMorgan Chase & Co. is an American multinational investment bank and financial services holding company. As a "Bulge Bracket" bank, it is a major provider of various investment banking and financial services. It is one of America's Big Four banks, along with Bank of America, Citigroup, and Wells Fargo. JPMorgan Chase is considered to be a universal bank and a custodian bank. The J.P. Morgan brand is used by investment banking, asset management, private banking, private wealth management, and treasury services divisions.

In a fast-moving and increasingly complex global economy, our success depends on how faithfully we adhere to our core principles: delivering exceptional client service; acting with integrity and responsibility, and supporting the growth of our employees.

Job Description:

You will be working on reducing the risk of assets using ml. As far as two months internship goes, there will be a lot of finance-based learning involved and then you'll get a project depending on the team you are in. You will be working on developing tools that automate some stages of trading equities that have been manual before. There will also be another project regarding checking index levels which you will be working on.

Location: Mumbai

Shortlisting Process: Resume shortlisting, Test, Interview

CGPA Cutoff: NA

Test:

Yes

Aptitude test - online - 1 hr

Technical test - online - 1 hr

Coding, Maths like Linear Algebra, P&C

GD: No

Interview:

No of interview rounds - 5

4 Technical, 1 HR

Last year interview Sample questions -

Round 1: (40 mins)

- Round Question on two sum - gave naive approach, was told to write pseudo code
- Gave better approach - pseudo-code
- Pseudocode for merge sort
- Reverse a linked list - Both iteratively and recursively
- Explain eigenvector, eigenvalue and real-world example
- How do u find the eigenvalues? I also told her why $|A - \lambda I| = 0$
- How do u then find eigenvectors using eigenvalues
- Questions on OOPS (I was not able to answer properly 2:

Round 2: (15 mins)

- Linear regression and KNN discussion
- Probability qs - 3 tosses, can stop anytime and take the recent toss
- Prob qs - Keep rolling till you get 4/5/6, you will get number of rolls u reached if 4/5 or 0 if 6
- Find the volume of tea in cup given some height h

Round 3: (40 mins)

- You have a function which generates a number from 1-5 with equal probability.
- Write code to generate from 1-7. Hint: Try generating from 1-25, bring it to 1-21, Interview Questions 2 bring it to 1-7
- Function which tosses a coin with equal probability, write code to get an event with 75% probability
- General discussion about his work and my interests

Round 4: (30 mins)

- Markov chain in probability
- Moment generator function
- Moment of inertia of cone
- Newton Raphson method
- General discussion

Round 5 : (HR-15 mins)

- Tell me about yourself
- Greatest achievement other than JEE
- Tell me something not in resume
- Discussion about work culture

No of offers: 4

Suggestions:

- Work out the problem at hand with your interviewer is most basic and best thing, your thought process will be evaluated
- Be confident and looking interested in the subject will be helpful
- Be thorough with the maths and puzzle questions
-

Preparation Material:

- Probability: heard on the street, 50 problems in probability (direct questions were asked from this book), probability course from Institute
- Machine learning: courses from Institute (or Andrew NG courses)
- Interviewbit - coding questions
- Brainstellar, leetcode, geeksforgeeks for coding
- Like solve more puzzles and brush up on basics of Calculus, linear algebra and probability theory

Open for

- Btech: All
- Dual Degree: All
- IDDD:
 - * Advanced Materials and Nanotechnology
 - * Bio-Medical Engineering
 - * Computational Engineering
 - * Data Science
 - * Robotics
 - * Quantum Science and Technology
 - * Tech MBA
- MTech: All

Stipend: INR 150000 monthly

Jane Street

Profile : Financial Trading

About Jane Street

Job Description

Our internships center around hands-on mentorship and a robust educational curriculum that includes challenging classes, interactive sessions, and small group discussions. Over the course of 10 weeks, you'll be matched with full-time employees in your role who will mentor you as you tackle real-world projects they design. You'll also be able to access our physical and virtual educational resources, attend guest speakers and social events, and hopefully get a real sense of what it would be like to work here full time.

If you've never thought about a career in finance, you're in good company—many of us were in the same position before working here. If you have a curious mind, a collaborative nature, and a passion for solving interesting problems, we have a feeling you'll fit right in.

About the Position:

As a Quantitative Trading intern, you'll be part of an immersive experience, paired with experienced Traders who will teach you how we identify market signals, analyze and execute trading strategies, construct quantitative models, conduct statistical analysis, and build trading intuition.

During the program you'll work on projects that expose you to the wide variety of problems, we solve every day. Interns have the chance to be mentored sequentially by full-time employees working in two different areas of trading.

Quantitative Trading interns work on a diverse range of projects with their mentors, conducting studies on new or existing datasets, building quantitative models, writing new tools, or even considering big-picture questions that were still trying to figure out. Project work is complemented by classes on the broader fundamentals of markets and trading, lunch seminars, and dozens of simulated interactive trading sessions.

A profitable trading strategy is only as strong as the technology it runs on, and we consider ourselves as much a technology company as a trading firm. While exposure to a particular programming language is not required, general programming experience is a plus.

If you'd like to learn more, you can read about our interview process and meet some of our newest hires.

<https://www.janestreet.com/join-jane-street/interviewing/>

<https://www.janestreet.com/join-jane-street/get-to-know-us/>

About You:

We don't expect you to have a background in finance or any other specific field—we're looking for smart people who enjoy solving interesting problems. We're actually more interested in how you think and learn than what you currently know. You should be:

- A strong quantitative thinker who enjoys working collaboratively on a team
- Eager to ask questions, admit mistakes, and learn new things
- Fluent in English

Shortlisting Process: Resume shortlisting, test (only for a few), interview

CGPA Cutoff: -

GD: No

No of interview rounds - 4

Interview:

- All rounds are technical, no HR.
- All rounds have probability and problem-solving questions. Expected values were asked in a lot of questions.
- Questions involved decision-making using probability, problems involving games wherein you need to develop a strategy for positive expectancy, and game theory.
- Mostly no coding is involved. Some candidates had very basic coding questions.

Round 1:

- For some students, it was a test. For others, interview.

Suggestions:

- Math olympiad ranks, Jee advanced rank, CGPA, and ML-based projects are some points that can help during resume shortlisting.
- Problem-solving based on logical thinking and probability is the major focus of the selection process once resume shortlisting is done.
- Good depth in basics of probability, and good thinking to reason out and find optimal strategies help.
- Background in finance is not exactly necessary but might give an edge
- Be a little comfortable with Excel.
- Solve puzzles.
- Don't hesitate to speak up during the interview, be free, calm, and show interest in problems during the interview. Even if you take time to think before answering, try not to take long and speak up once in a while, the interviewer could help.
- Speak up and understand the problem properly by asking clarifying questions.
- Look at the process of solving a problem as more of a discussion and keep giving updates on what you are doing. Show your thinking process.
- Once you make it to the interview process, can reach out to seniors placed there for a better understanding of what to expect.

Preparation Material:

- Brainstellar for problem-solving.
- Books like 'Heard on the Street 40 probability questions', '50 problems of probability'. Other books with logical reasoning questions and probability questions.
- Jane Street's website has problems.

Open for:

- Btech: Computer Science & Engg, Electrical Engg, Engineering Physics
- Dual Degree*: Computer Science & Engg, Electrical Engg, Physics
- IDDD: Computational Engineering

Stipend:1,190,000 - 1,200,000 (or equivalent to HK\$125,000) Monthly+ Accommodation

Link To Video

Fundaes:<https://drive.google.com/drive/folders/1j4Dm1KdTK7j7TEMKIZkAoNRXnZ7635s>

JANE STREET

Profile: Software Engineering

About Jane Street:

Jane street trade a wide range of financial products, including ETFs, Equities, Bonds, Options, Commodities, Digital Assets, Futures, and Currencies. We have global offices which allow us to make markets continually on more than 200 electronic exchanges and other trading venues in more than 40 countries around the world.

Quantitative analysis and insights into related markets enable us to make competitive markets in even the most complicated products. Technology is at the core of how we approach trading, and we consider ourselves as much a technology company as a trading firm.

Job Description

As a Software Engineering intern, you'll learn how we use OCaml (our primary development language) in our day to day work, and gain exposure to the libraries and tools that are foundational to our internal systems.

During the program, you'll work on two projects, mentored closely by the full-time employees who designed them. Some projects consider big-picture questions that we're still trying to figure out, while others involve building something new. Your mentors will work in two distinct areas, so you'll better understand the wide range of problems we solve every day, from machine learning to systems administration to programming language design.

If you'd like to learn more, you can read about our interview process, meet some of our newest hires, or get a sense of what our most recent intern projects looked like.

<https://blog.janestreet.com/applying-to-jane-street/>

<https://www.janestreet.com/join-jane-street/get-to-know-us/>

<https://blog.janestreet.com/what-the-interns-have-wrought-2020/>

About You:

We don't expect you to have a background in finance, OCaml, functional programming, or any other specific field—we're looking for smart people who enjoy solving interesting problems. We're more interested in how you think and learn than what you currently know. You should be:

- A top-notch programmer with a passion for technology
- Collaborative and courteous with strong interpersonal and communication skills
- Eager to ask questions, admit mistakes, and learn new things
- Fluent in English

Shortlisting Process: i) Resume Shortlist iii) Interview

CGPA Cutoff: NA

No of interview rounds - 4

Interview:

- Problem-solving and cognition skills were tested in each of the rounds
- CG, Interns and projects would be helpful to drive the interview

Suggestions:

- Do practical programming and internships and competitive programming and try to maintain decent CG.

Preparation Material:

- Codeforces, CodeChef and leetcode
- Basic DSA course

Open for

- Btech: Computer Science & Engg
Electrical Engg
- Dual Degree: Computer Science & Engg
Electrical Engg

Stipend: 1,190,000 - 1,200,000 (HK\$125,000) Monthly

MICROSOFT

Profile: Machine learning

About Microsoft:

Microsoft India (R&D) Private Limited, a subsidiary of Microsoft Corporation, set up Microsoft India Development Center (MSIDC) at Hyderabad in 1998. Over the course of the past 21 plus years, we have expanded to become one of Microsoft Corporation's largest R&D centers outside its headquarters in Redmond. MSIDC is a part of Microsoft Corporation's strategy of global shared development, where teams across geographies collaborate to build great software and services. Our engineers in MSIDC contribute to the engineering of critical and important technologies in the above areas, thereby impacting millions of lives.

Job Description:

- Develop highly scalable classifiers, data regression, recommendations, and predictive models
- Analyze petabytes of data and mine patterns from logs
- Bring data to life using rich visualizations
- Create language models, speech models, vision models, etc.

- Suggest, collect and synthesize requirements and innovate to create next-generation feature sets.
- Enable natural and contextual interactions in apps integrating cognitive and analytics services
- Adapt standard ML methods to best exploit modern parallel environments.
- Implement algorithms that power user and developer-facing products reaching out to millions of users. Measure and optimize the quality of your algorithms.
- Work in product teams shipping large scale end to end applications/solutions.

Shortlisting Process: Resume shortlist, test, interviews

CGPA Cutoff : 7.5

Test :

Technical test:

- Questions based on TP/FP/precision. Some were based on random forest. Some SQL and statistics questions were also there.
- ML theory and usage of ML libraries like sklearn and nltk.
- K means clustering, decision trees, regression, neural networks

GD: No

No of interview rounds - 3- (2technical and 1 Hr)

Interview:

- Qsns based on Linear Regression, some assumptions in Logistic regression, how is the log loss related to bernoulli distribution. The HR round was very lite just introducing each other and general conversation on what was done in the company.
- KNN, Pearson correlation, correlation vs causation, very basic DBMS questions

Suggestions:

- Complete probability and statistics course. Do many practice problems. Pick a profile to target, go through bluebook for interesting companies to apply to. Approach seniors for fundaes one on one (especially people you know personally). Find 1-3 primary targets and 4-5 secondary target companies. Research the primary target companies and watch the feedback sessions. Attend as many tests as possible in your target profile for test experience.
- Use paper and pen during interviews if got stuck.
- Don't worry about the result, just do your best.
- Always speak out your mind
- Dont forget to give all possible solutions to your questions. Dont engage in arguments. Keep your answer to the point. If you dont know the concept then let them know that and then try to attempt the question. Finally show involvement in learning by asking whether the answers were right for the questions and if not ask them what works have been a better approach.

Preparation Material:

- Leetcode easy and few medium,
- Analytics Vidhya data science articles
- Interview bit
- MA2040 - Probab
- Coursera - Andrew Ng Machine Learning, Deep Learning Specialization

Open for:

- Btech: Computer Science & Engg
- Dual Degree: Computer Science & Engg

Stipend: 80,000 monthly

Link To Video Fundaes:

https://drive.google.com/file/d/1NXMUeDdkLELWoM19og8EA0J1_avwgToJ/view?usp=sharing

MICROSOFT

Profile: Software

Job Description:

Software Engineers are primarily responsible for:

- Planning: o Understanding customer requirements. o Assisting with project planning, scoping, prioritization. o Providing estimates; Identifying task ownership.
- Design: o Creating simple, flexible and comprehensive designs. o Providing and soliciting design feedback.
- Implementation: o Writing quality code at source. o Authoring validation tests; Providing timely issue resolutions.

Shortlisting Process: Resume shortlist, test, interviews

CGPA Cutoff : 7.5

Test :

Technical test:

- Questions on strings and arrays.
- Given a string containing only 'a', 'b', '?'. Find number of possible strings such that if '?' is replaced by 'a' or 'b' it should not contain 3 same consecutive letters.
- Given N dice rolls as array A . You don't remember next k numbers. Return an array whose containing k numbers. AM of N+k number is given. Return k sized array that satisfies the given condition

GD: No

No of interview rounds - 3- (2technical and 1 Hr)

Interview:

- Qsns based on Coding questions in both, for me on - binary Search(modified), graphs(not to code but explain approach), and trees.
- Data structures and algorithms and computer architecture Related to cache protocols
- Programming questions with basic questions for round 1, followed by intermediate questions in round 2 and 3. General linear programming questions should suffice

Suggestions:

- Just try to be calm. Don't compare with anyone else. & Don't lie anything be fare.
- Always speak loud abt ur thought process and keep confidence all the time
- If stucked, try discussing thought process with the interviewer, they'll guide you towards the correct approach

Material:

- Preparing from leetcode, code chef, code forces, interview bit etc.
- Basic DSA... searching and sorting
- Basic Math, Logic. & Dynamic Programming

Open for:

- Btech: Computer Science & Engg
- Dual Degree: Computer Science & Engg

Stipend: 80,000 monthly

Link To Video Fundaes:

<https://drive.google.com/file/d/1TqjF9yAcneLXgAasXQhGy0e74YuNeGLZ/view?usp=sharing>

Morgan Stanley

Profile : Sales and trading

About Morgan Stanley :

Morgan Stanley is a financial services corporation that, through its affiliates and subsidiaries, advises, and originates, trades, manages, and distributes capital for institutions, governments, and individuals. The company operates in three business segments: Institutional Securities, Wealth Management, and Investment Management.

Job Description

This intensive 2-month program includes a Firmwide orientation to Morgan Stanley's businesses and division specific training. Your training will continue throughout the summer with structured learning sessions run by senior executives. Similarly, you will have many opportunities to integrate with peers and senior colleagues through a series of networking, social, charity, and mentoring events.

RESPONSIBILITIES

- Sales: Work alongside experienced employees to learn how we build our client base and establish and maintain long-term client relationships. Assist with developing and presenting investment ideas and the fundamentals of selling and cross-selling the Firm's products.
- Trading: Execute trading ideas and analysis, and support all aspects of the market-making trade execution process, from providing research analytics on trades to relative value analysis.
- Structuring: Learn how to build valuation models to help issuers and investors optimize a transaction's economics, and quantify sources of value and risk.
- Analytics: Provide quantitative and qualitative metrics and analytics around client revenue and profitability to drive internal business and client strategy; work with a team to help clients efficiently manage their commission dollars by creating increased transparency around the services that clients value.

QUALIFICATIONS/SKILLS/REQUIREMENTS

- You are pursuing an undergraduate or Master's degree in your penultimate year of study
- Financial, economics, Mathematics/Engineering or business-related studies preferred.
- A genuine interest and understanding of the financial markets.
- Fluency in English and strong oral/written communication skills are required.
- Candidates should be analytical, insightful, quick learners, team players, multi-taskers, with a positive attitude.

Shortlisting Process: i) Resume Shortlist ii) Test iii) Interview

CGPA Cutoff: 9

Test:

Test contains questions from probability, aptitude, verbal reasoning, numeric reasoning, english comprehension, and DSA.

GD: None

No of interview rounds - 2 Technical Interview and 1 HR Interview

Interview:

Round 1:

- Questions mainly focus on your coding skills along with probability

Sample Question

You are given a 5 sided die, how do you choose a number between 1 and 7 uniformly using the die

Round 2:

- Focussed on problem-solving and Algorithms.

Sample Questions:

Why did zomato list at a premium even though they've incurred losses regularly

Guesstimate the weekly revenue of a tea/snacks owner on your campus

Questions on your projects

Round 3:

- Basic HR questions like:

Why this role at Morgan Stanley?

Tell me about yourself, Do you know what S&T entails, Why this role at Morgan Stanley

What has covid taught you

Suggestions:

- Be confident and show clarity of thought when answering HR questions. Take time to answer questions, speak clearly and slowly. They value well thought out answers over something off the top of your head
- Always speak loud about your thought process and keep confidence all the time
- Supplement your general preparation with specific preparation on your resume points, particularly on tech/finance related projects. Be prepared for any kind of cross questioning on whatever you put on your resume. This can mean the difference between selection and rejection
- Having an interest in finance would help you a lot .
- Starting Earlier helps.

Preparation Material:

- Introduction to Probability by Bertsekas
- 50 questions on probability
- Have a look at some fermi brain teasers
- Graduate Trader
- Brilliant .org
- Case interviews cracked and IIM casebook might help

Open for:

- Btech: all
- Dual Degree: all

Stipend: Rs.1,65,000 per month

Link To Video Fundaes:

https://drive.google.com/drive/folders/1m5SHZ1D-PCW727oNNp_hXoHOipJYtemY?usp=sharing

Morgan Stanley

Profile : Quant and Strat

Job Description

This intensive 2-month program includes a Firmwide orientation to Morgan Stanley's businesses and division-specific training. Your training will continue throughout the summer with structured learning sessions run by senior executives. Similarly, you will have many opportunities to integrate with peers and senior colleagues through a series of networking, social, charity, and mentoring events.

RESPONSIBILITIES

- Sales: Work alongside experienced employees to learn how we build our client base and establish and maintain long-term client relationships. Assist with developing and presenting investment ideas and the fundamentals of selling and cross-selling the Firm's products.
- Trading: Execute trading ideas and analysis, and support all aspects of the market-making trade execution process, from providing research analytics on trades to relative value analysis.
- Structuring: Learn how to build valuation models to help issuers and investors optimize a transaction's economics, and quantify sources of value and risk.
- Analytics: Provide quantitative and qualitative metrics and analytics around client revenue and profitability to drive internal business and client strategy; work with a team to help clients efficiently manage their commission dollars by creating increased transparency around the services that client's value.

QUALIFICATIONS/SKILLS/REQUIREMENTS

- You are pursuing an undergraduate or Master's degree in your penultimate year of study
- Financial, economics, Mathematics/Engineering or business related studies preferred.
- A genuine interest and understanding of the financial markets.
- Fluency in English and strong oral/written communication skills are required.
- Candidates should be analytical, insightful, quick learners, team players, multi-taskers, and with a positive attitude.

Shortlisting Process: i) Resume Shortlist ii) Test iii) Interview

CGPA Cutoff : 9

Test :

Test contains questions from probability, aptitude , verbal reasoning , numeric reasoning ,english comprehension, and DSA.

GD: None

No of interview rounds - 2 Technical Interview and 1 HR Interview

Interview:

Round 1:

- Questions focussed on Quantitative Aptitude and ML

Round 2:

- Focussed on Coding Probability and Math

Sample Questions:

Solving a Differential Equation.

Round 3:

- Basic HR questions like:
Why this role at Morgan Stanley?
Tell me about yourself, Do you know what S&T entails, Why this role at Morgan Stanley
What has covid taught you

Suggestions:

- Be confident and show clarity of thought when answering HR questions. Take time to answer questions, speak clearly and slowly. They value well thought out answers over something off the top of your head
- Always speak loud about your thought process and keep confidence all the time
- Supplement your general preparation with specific preparation on your resume points, particularly on tech/finance related projects. Be prepared for any kind of cross questioning on whatever you put on your resume. This can mean the difference between selection and rejection
- Having an interest in finance would help you a lot .
- Starting Earlier helps.

Preparation Material:

- Introduction to Probability by Bertsekas
- 50 questions on probability
- Have a look at some fermi brain teasers

- Graduate Trader
- Brilliant .org
- Case interviews cracked and IIM casebook might help

Open for:

- Btech: all
- Dual Degree: all

Stipend: Rs.1,65,000 per month

Link To Video Fundaes:

https://drive.google.com/drive/folders/1m5SHZ1D-PCW727oNNp_hXoHOipJYtemY?usp=sharing

NOMURA

Profile: Wholesale strategy

About Nomura:

Nomura is an Asia-headquartered financial services group with an integrated global network spanning over 30 countries. By connecting markets East & West, Nomura services the needs of individuals, institutions, corporates and governments through its four business divisions: Retail,

Investment Management, and Wholesale (Global Markets and Investment Banking). Founded in 1925, the firm is built on a tradition of disciplined entrepreneurship, serving clients with creative solutions and considered thought leadership. For further information about Nomura, visit www.nomura.com. Nomura's Wholesale business includes Global Markets (Fixed Income & Equities) and Investment Banking division (ECM, DCM, M&A). The wholesale division operates across all four regions – Japan, Asia, Europe and the Americas – and is a globally integrated franchise.

Job Description:

The internship will give you exposure in most of the following areas (the list is illustrative and not exhaustive):

- Work as a part of the Wholesale Strategy division on global, regional and divisional projects
- Conduct analysis of the competitive and general macro/market environment based on public data and industry reports used for senior management presentations. Consolidate/analyze quarterly financial results for Nomura and competitors
- Support strategy team seniors/business on special/ad-hoc projects (for e.g.: identifying opportunities in new areas of growth, the impact of changing regulations on capital market business, acquisition screening/evaluation, new digital business growth opportunities, etc.)
- Prepare presentations for senior management board meetings, town halls and off-sites
- Most of the projects require working closely with strategy team members, business CAOs, finance and other functional teams in different regions; working independently or with the support of another member of the team

Shortlisting Process: Resume shortlist, GD, Interview

CGPA Cutoff: 8

GD:

If Digital currency is centralized by government in India: Pros and Cons

A final question relating to Nomura and the GD topic would be asked, answer that well.

No of interview rounds - 4- (3technical and 1 Hr)

Interview:

- A case study that was given, current markets, guesstimate, why do you want to join the company if banks lower lending rates, what happens to inflation rates?
- Grilled us on a market entry case study. Guesstimates, basic financial terms like yield curve, interest rates, inflation etc. HR was a mere formality, why finance, fit with the company etc.
- Inversion of the yield curve is volatility good for an investment bank, what are futures, economic relief measures in lieu of Covid, and what will happen to the dollar if these measures are tapered.

Suggestions:

- Be conversational during the interviews, and listen attentively. They are very forthcoming people and will make you feel comfortable during the interview. Be able to justify whatever you've put on the resume.
- Start exploring early on what interests you. Don't apply to companies just to get a shortlist/internship.
- Get your case study revised by a lot of seniors
- Don't forget to give all possible solutions to your questions. Don't engage in arguments. Keep your answer to the point. If you don't know the concept then let them know that and then try to attempt the question. Finally, show involvement in learning by asking whether the answers were right for the questions and if not ask them what would have been a better approach.

Preparation Material:

- PoE is a highly recommended course for WS. Heard on the street, 50 problems in probability and basic financial knowledge is an added bonus. Financial Markets on Coursera is a good course for an intro to finance. ,
- You must participate in case study competitions from early on to get an advantage.
- Investopedia, geeks for geeks, Finshots, Accounting and Finance for engineers.

Open for:

- Btech: All branches
- Dual Degree: All branches

Stipend: 75000 monthly

Link To Video Fundaes:

https://drive.google.com/file/d/1GWcOjx6l9pCuPuOja8L_-5G9yR0Z2YiC/view?usp=sharing

Procter & Gamble

Profile: FMCG (Product and Supply Chain intern)

About the company:

The company is involved in manufacturing and marketing fast-moving consumer goods that are in day-to-day demand.

Job Description:

Getting thousands of different products onto the shelves in our customer's stores in the right quantities with precise quality in a very good time manner really does present a new challenge every single day.

P&G's Supply Network Operations (SNO) organization is there to meet these challenges: Forecasting customer demand, handling the information flows from orders, shipments, and invoices, and leading the physical distribution process from Distribution Centre to the customer's shelf.

By joining us in the supply chain, you can help us develop highly sophisticated, more integrated approaches, taking advantage of the latest advancements in digitized plants and connected smart technology. Our aim is to ignite your potential and equip you to enhance the efficiency and sustainability of our supply chain operation.

YOUR ROLE AS AN INTERN IN SNO:

The internship projects we offer can involve a combination of:

One or several operational missions or/and projects in the area of supply chain management

Contribution to the management of our logistical relations with a customer

Upstream Supply Chain design or innovation projects that will transform our supply chain of tomorrow

Playing a meaningful role in exciting projects such as crafting the supply chain setups for new products

What we offer:

We guarantee you responsibilities from day 1 and have the ownership of at least one or two big projects

Continuous coaching– you will work with hardworking people and receive both formal training as well as day-to-day mentoring from your coach and manager so that you grow & develop

You will join our dynamic SNO teams, and work closely with colleagues from other functions.

Dynamic and respectful international work environment– employees are at the core, we value every individual and encourage initiatives, promoting agility and work/life balance.

Qualifications:

We are looking for students who are -

- A born leader and hardworking to make things happen, and this shows in your academic & non-academic achievements
- Have strong analytical and problem-solving skills
- Collaborate well with diverse groups of people
- Would like to work autonomously and prove your leadership and innovative spirit
- Work well with Microsoft Office
- Programming/Algorithms Knowledge
- English proficiency

Shortlisting Process: Test, GD, Interview

CGPA Cutoff: Above 8 cgpa is suggested.

Test: Psychometric test and Logical reasoning test.

Apply on their website and attend the tests. They mostly contain situation questions and to understand what kind of leader you are, your conviction towards work, and your attitude. They give example questions in the console to help you get accustomed to the test.

Check previous year's tests and solve them.

GD:

- No particular topic was given for the GD.
- They scouted for topics from resumes to discuss.
- Number of people per GD: less than 5.
- Company's expectations: Quick thinking, crisp communication, and respectful interjections.

No of interview rounds - 2 or 3

Interview:

Not many technical questions. All the interviews were with a group of 3-4 people. Keep the Context, Action, Result (CAR) format stable. They will ask you to revert back to the format if you deviate.

Round 1:

- Behavioural and real-life situational questions.
- And a few HR questions in the end.
- Finally, only 2 from the group will be selected for the next round.

Round 2:

- Similar to Round 1.

Round 3:

- If you get shortlisted for this round, it basically means you are selected as this round seemed more like an onboarding call.

Example interview questions:

- The company has found a new technology to make sure the employees are more efficient in their work but you are having a tough time convincing the senior managers for the same. How would you handle the situation? (Similar behavioural questions like these were asked)

Suggestions:

- Start preparation around July or earlier.
- Speak to a lot of seniors and keep a clear idea about what you have put in your resume. Practice quick elevator pitches for points mentioned in the resume.
- Format your resume well by confirming with seniors.
- Don't beat around the bush
- Prior experience with supply chain management roles would help with the shortlisting.
- With respect to PoRs and prior internships: keep concise CAR format explanations and pitch points ready. (core internships help)

Preparation Material:

- Resume is important. Have it well-formatted.
- Practice psychometric tests and try being more spontaneous. Improve your communication skills as well.
- Get to know more about the company so you know what to stress upon during the interview.

Open for:

- Btech: all
- Post Graduate:
 - Dual Degree: all
 - MTech: all
 - IDDD: all

Stipend:

Amount: INR 120000 monthly

Other facilities: Rs. 20000 rent allowance to be reimbursed on actuals

Link To Video Fundaes:

<https://drive.google.com/file/d/1ZaJmCCuvOBiGMZss2waAHt0wl2sWOcWT/view?usp=sharing>

Piramal

Profile: Chemical Core

About: Piramal

Piramal Group is a global business conglomerate with diverse interests in Pharma, Financial Services and Real Estate. The Group has offices in over 30 countries and a global brand presence in more than 100 markets. Based on the philosophy of 'Doing Well and Doing Good', the Group continues to create long-term value for its stakeholders and the community at large. In the three decades of its existence, Piramal Group has pursued a twin strategy of both organic and inorganic growth. Driven by its core values, Piramal Group steadfastly pursues inclusive growth, while adhering to ethical and values-driven practices.

Job Description:

The Summer Interns will work on Business Impact Projects across our sites in core areas of chemical engineering to solve live business problems using chemical engineering principles. Some illustrative areas of responsibility can include (not an exhaustive list)

- Facilitate continuous improvement & high impact projects across different functions and locations based on principles of chemical engineering and Lean Six Sigma, TPM & OE principles.
- Ensure delivery of business process improvement initiatives through the implementation of predetermined /agreed synergies.
- Demonstrate leadership in the application of technology to tackle manufacturing problems.
- Partner with site leadership teams and different team managers to identify process improvement, KRAs and KPIs for all functions, focusing on improving, and automating the packaging & other operations error-free.

Responsibilities:

- Explore and implement various cost-saving opportunities across different products at the site.
- Analyse the current processes deployed in production/quality functions and identify possible areas of automation to improve overall plant efficiency, compliance and productivity.
- Work on projects to minimize the operating cost of the plant in terms of utility generation, utility distribution, maintenance and repair, enhanced monitoring of processes etc.

- Conceptualize and manage various cross-functional business initiatives in project mode with the use of analytical techniques.
- Identify the gaps and therefore the possibilities of process automation in the current Order to Delivery (OTD) process.
- Optimise inventory levels for different raw materials (intermediates, APIs, excipients etc.) ensuring satisfactory service levels for customers.

Future opportunities:

- A very good place to start if you want to explore the pharmaceutical industry
- PPO(High conversion rate)

Location:

- Hyderabad
- Indore
- Chennai
- Ahmedabad

Shortlisting Process :

Resume shortlist, Test, GD, Interview

CGPA Cutoff: 7.5

Test:

Yes - 1hr - online

There were 4 tests;

The window for attempting the tests was given about 2-3 days

Based on Aptitude and mental ability

example:

Memory game

Maze challenge

(P&G test practices will be helpful)

GD:

Yes

(Note-This data is based on last year's interview, may change this year)

Duration: 2-3 mins

It was extempore

3 questions were given

- Introduce yourself (Tip - Be ready with Intro)
- Generic Questions
- Situation based question

Interview:

No of interview rounds - 1 or 2

Tech and HR interview; Duration: 30-35 min

Do's and Don'ts:

- Be positive, courteous and confident
- Don't bluff
- They see your thought process during the interview, share your thoughts and make sure you don't give up and withdraw.
- Be prepared to answer questions like "why chem engg?"
- Practice mock interviews and GDs with friends and seniors
- Be prepared for answering generic questions
eg- Give an instance where you showed your leadership qualities

No of offers: 4

Suggestions:

- Attending core classes might be beneficial, even during the intern season
- Have a strategy and be well prepared before giving the test and interview
- A proper Resume is a must, get it reviewed by multiple seniors before submitting and be thorough with your Resume
- Take guidance from previous seniors for the interviews
- Search for CSR Piramal/ Piramal Report to get to know about the company
- HR questions- Make sure you take note of the values and the other stuff during PPT and use them as much as possible
- Always ask questions at the end of the interview to show you're interested in the company
- PoR's, core projects/interns are helpful but not a necessity

Preparation Material:

- 64HR Questions Book
- India Bix (For aptitude questions)
- Chemical Courses (physical chemistry, inorganic chemistry, Thermodynamics)
- Practice aptitude questions from different websites

Open for:

- Btech: Chemical Engineering
- Dual Degree: Chemical Engineering

Stipend:

INR 125000 Monthly

Link To Video Fundaes:

<https://drive.google.com/file/d/1eSH701blztkhoSMRVNdu8BsxyhDZXE1u/view?usp=sharing>

Piramal

Profile: Software Engineering

About Piramal

Piramal Group is a global business conglomerate with diverse interests in Pharma, Financial Services and Real Estate. The Group has offices in over 30 countries and a global brand presence in more than 100 markets. Based on the philosophy of 'Doing Well and Doing Good', the Group continues to create long-term value for its stakeholders and the community at large. In the three decades of its existence, Piramal Group has pursued a twin strategy of both organic and inorganic growth. Driven by its core values, Piramal Group steadfastly pursues inclusive growth, while adhering to ethical and values-driven practices.

Job Description:

- Understand customer needs by collaborating with Product Managers and Business stakeholders
- Design, development, delivery and support of large scale, distributed software applications and tools
- Use software engineering best practices to ensure a high standard of quality and maintainability for all deliverables
- Work in an agile, startup-like development environment, where you are always working on the most important stuff
- Take initiatives and come up with new ideas to invent solutions for customers

Location:

- Bangalore
- Karnataka

Shortlisting Process: Resume shortlist, Test, Interview

CGPA Cutoff: 9

Test:

Aptitude test - online - 30 min

Technical test - online - 30 min

Coding skills knowledge

GD: No

Interview:

No of interview rounds - 1

mostly coding-based questions, not many HR questions

No of offers: 3

Suggestions:

- DSA courses will be helpful
- Go through about the company before the interview
- Don't hesitate to ask a question if you don't understand anything during the interview
- Knowledge mattered over certificates for the courses

Preparation Material:

- MA2040 - Probability (Heard on the Street)
- DSA (10x IITIAN, Leetcode, geeks for geeks)
- Hackerrank, Udemy
- No specific coding languages preferred: c, c++, python

Sample Questions:

- Questions were asked from strings and arrays.
- Binary trees and Hashing weren't covered.
- If we have an array of numbers, assigned with probabilities, print a hundred numbers such that the probability is reflected in the frequency of numbers printed.
- Select elements such that no consecutive elements are selected - needs dynamic programming.

- DSA and competitive coding are extremely important and formed the crux of the interviews. Not many other types of questions were asked in the interview. 1 - 1.5 months of prep is ideal.
- Java static methods
- Maximum Area of Rectangle in Histogram

Open for

- Btech: Computer Science & Engineering, Electrical Engineering, Mechanical Engineering

Stipend: INR 100000 Monthly

Link To Video Fundaes:

<https://drive.google.com/file/d/14PZZDed1z1Y4Tvef9UWIE0GCqvQLyuP8/view?usp=sharing>

Qualcomm

Profile: Research & Development

About Qualcomm:

Over the past thirty years, the systems engineering team at Qualcomm conceived and commercialized key innovations in wireless communication systems including cdma2000, EV-DO, HSPA, OFDMA based LTE-Advanced, Carrier Aggregation, HetNets, Small Cells, LTE in Unlicensed, LTE Direct, M2M (eMTC, NB-IoT), Wi-Fi 802.11ac and 802.11ax.

We are looking for innovative engineers in the areas of wireless communications and signal processing, who develop a deep understanding of problems through thoughtful data-driven analysis and then shepherd the solutions through the lab to real-world deployment.

Job Description:

Title - Systems Engineers/Specialist (PHY and MAC Layer)

Individuals in this role will actively participate and contribute to Qualcomm's systems engineering activities related to the evolution of 3G, 4G, 5G, WLAN and satellite communications technologies towards ever-improving efficiency and capability. They will be required to gain a thorough understanding of 3GPP/3GPP2 physical layer specifications and will be responsible for designing WWAN modem baseband algorithms and subsequent performance characterization, fixed-point design and validation. The work would include theoretical analysis, computer-aided analysis, regular active participation in design and review sessions, contribution to Qualcomm's IP portfolio, systems support for implementation, technical contributions towards proprietary or public air interface specifications

Location:

- Hyderabad
- Chennai
- Bangalore

Shortlisting Process: Resume shortlisting, Test, Interview

CGPA cutoff : NA

Test :

Yes

Aptitude Test - online - 45 mins

Technical Test - online - 45 mins

Topics: Linear algebra, probability, Digital signal processing, Digital communication

GD: No

Interview:

No of interview rounds - 2

2 Technical rounds

Sample questions :

For Modem Firmware

1. Explain end to end communication block diagram, Matrix multiplication c program

For Modem System

1. prove eigenvalues of Hermitian matrix are real

2. x is Gaussian random Variable $y=x^2$. Is x and y correlated and are x and y are dependent or independent random variables.

3. Bpsk optimum threshold point and happens to the threshold when probability changes.

4. x is a row vector then eigenvalues of xx^T

No of offers: 5

Suggestions:

- Make sure you understand the topic to implement in practice at the hardware level
- Even if you get a few questions wrong, demonstrating your ability to learn and improve will give you an edge.

Preparation Material:

- First semester courses

- Books- Morris Mano
- Websites- Sathish Kashyap Gate questions
- Courses- Hardware: Dig IC, Digsys, Comp Org, SigP: DSP, Multirate DSP, Info Theory(take the last two if you can)Comms: Commsys, Digital Comms, ML: PRML, DL, Math: Probability and LinAl

Open for:

- M-tech: Electrical Engineering
- Dual Degree: Computer Science & Engineering, Electrical Engineering
- IDDD: Data Science

Stipend: INR 45000 Monthly

Qualcomm

Profile: Software Engineering

About Qualcomm

Qualcomm is an American multinational corporation, It creates semiconductors, software, and services related to wireless technology. It owns patents critical to the 5G,4G, CDMA2000, TD-SCDMA and WCDMA mobile communications standards. Over the years, Qualcomm has expanded into selling semiconductor products in a predominantly fabless manufacturing model. It also developed semiconductor components or software for vehicles, watches, laptops, wi-fi, smartphones, and other devices.

We know our employees' ideas change the world. For more than three decades, we've been a global leader in mobile technology, continually pushing the boundaries of what's possible. Working with customers across industries — from automotive to health care, from smart cities to robotics— we continue to accelerate innovation and unlock new possibilities in a time where everything is connected. By joining the Qualcomm family, you too can bring the future forward Faster

Job Description:

Campus Grads will be working on the following areas:

- Development of real-time embedded software and device drivers
- Mobile SW development for Windows Mobile, Android or Linux
- Good understanding of OS concepts, Data structures, etc
- C/C++ and object-oriented design
- Wireless network standards such as CDMA/GSM/UMTS/LTE
- Linux/UNIX, Linux Drivers, Linux Kernel Development
- Protocols such TCP/UDP/IP/SIP/RTP etc
- Multimedia technologies including Audio, Video, Imaging
- Excellent analytical and problem-solving skills
- Ability to collaborate and work in teams.
- Good verbal and written communication skills

Responsibilities:

As a software engineer, you will design, and develop Software for Qualcomm's mobile chipsets which are based on cutting-edge technology. Qualcomm is looking for energetic, creative, and

self-driven engineers to work in

- Multimedia Technologies such as Audio and Video codecs, Image Processing,
- Wireless Modem Technologies, such as 4G, WiFi, Bluetooth, and Self-Organizing Networks.
- Platform Level SW, such as Linux, Android, Windows, and Board Support Packages.
- IoT Technologies, for Connected Cameras, Smart Assistants, Drones, Virtual Reality, Augmented Reality.

Opportunities:

- SW development for Android, Window Mobile-based Embedded Platforms
- Multimedia software stack, firmware and driver Development
- Wireless Modem and connectivity Software and Firmware Development
- Communication protocol stack Software Development
- Kernel, BSP and Device Driver Development
- Application SW and UI development.
- SW Architecture for embedded devices based on Android, and Windows.
- Design and development based on Object-oriented programming.

Education:

Masters, Bachelors: Computer Science Engineering, Communication Engineering, ECE,

Shortlisting Process: Resume shortlist, Test, Interview

CGPA Cutoff: 8.5

Test :

yes

Aptitude test - online - 45 min

Technical test - online - 45 min

Topics- Aptitude, basic math, C programming, data structures, Operating systems, Object-a programming, computer architecture

GD: No

Interview:

No of interview rounds - 2

Both might be tech / 1 tech and 1 HR round

No of offers: 5

Suggestions:

- Be thorough with the fundamental knowledge of Computer science concepts
- Be confident and don't waste time if you don't know the answer, let the interviewer know and move on to the next one.

Preparation Material:

- Computer architecture and organization course (CS2600)
- Gate notes
- Geeksforgeeks
- Leetcode
- Basic DSA questions

Open for:

- Btech: Computer Science & Engg
- Dual Degree: Computer Science & Engg
- IDDD: Data Science

Stipend: INR 45000 Monthly

Optiver

Profile : Software Engineering

Job Description

Software Engineer Internship 2022 (Amsterdam)

Do you want to experience working at a company that is at the cutting edge of technology, running a global network with thousands of high-performance low-latency applications, generating petabytes of data every day? Are you interested in boosting your future career? Then apply for the Software Engineer Internship at Optiver in Amsterdam, the Netherlands! Technology at Optiver

Since trading on the floor changed to screen-based trading, we constantly need the most advanced technology, trading software and connections to the market. In short, we need the best Engineers to develop, optimize and support our systems and tools. The atmosphere we are working in is fast, but exciting. This makes Tech at Optiver a great challenge whereby expertise, innovation and fun go hand in hand every day.

What you'll do

During this internship you will be responsible for your own project from day one, guided along the way by a senior developer assigned as your mentor. You will interact closely with our traders and researchers, directly impacting the end-results of the company. During the program you will also join several lectures to learn about trading and our other departments to get a full understanding of our business.

Examples of potential projects that you could be working on:

- The performance of our systems – profiling and optimizing our software and hardware
- Developing tools in close collaboration with our traders to improve our trading strategies
- Building a powerful tool to find errors in our systems by turning huge amounts of data into useful information

In all cases you can expect that all projects will be a valuable contribution to our business, focusing on actual issues that we face and like to see solved.

What you need to be successful

You are eager to learn and a logical thinker. You are able to explain your thoughts clearly through written and verbal communication and ask the right questions. You look for opportunities to get out of your comfort zone and like frequent change, always staying on top of things and keep improving.

Moreover:

- You are a penultimate year student in Computer Science, Engineering or equivalent (finishing studies in 2023);

- You are proficient in either C++, Python or Java
- Have the ability and desire to write simple and clean code;
- Have an entrepreneurial attitude
- Have an interest in the financial industry (previous knowledge is not required);

What you can expect from us

An energetic and collaborative work culture with ambitious, down-to-earth colleagues. We constantly ask ourselves how to do better, which creates a stimulating and fun environment

To be concrete:

- A 2-month internship taking place in May-June 2022
- Mentoring and feedback from senior engineers on how to write clean, lean and pragmatic code, and solve complex problems with simple solutions
- Competitive salary: €6250 per month
- (Paid) furnished housing arrangement provided by Optiver in the city centre of Amsterdam
- Awesome social events and outings
- Free breakfast and lunch provided at Optiver, weekly massages & a bicycle to explore Amsterdam
- Most importantly, the possibility to receive a full-time offer upon completion of internship, to an office of your choice (Amsterdam or Sydney)
- Have a look at this video to get a glimpse of the Optiver internship experience

Shortlisting Process: Test, Interview

CGPA Cutoff : NIL

Test : Yes

Topics asked: Basic DSA and conceptual questions

GD: No

No of interview rounds - 2 (Technical Rounds) & 1 (HR Round)

Interview:

Round 1 & Round 2 :

- Problem solving and Systems design
- Fundamentals of Data structures

- Reasoning based, They gave you a problem and you had to slowly think aloud to the solution.
- Interviewer gave a situation to design a system for. You have to discuss with interviewer and explain your decisions

Round 3 (HR Round) :

- Personality, strengths, and weaknesses
- General HR questions

Suggestions:

- Be friendly, enthusiastic and talk to your interviewer with confidence
- Don't give up mid-interview. Keep thinking aloud, they will help you out if you are stuck

Preparation Material:

- Heard on the street
- Rankyourbrain
- Gen aptitude tests
- 50 Problems in probability and Leetcode questions
- 50 HR questions
- Interviewbit

Open for:

- Btech: All
- Dual Degree: All
- IDDD : Advanced Materials and Nanotechnology, Bio-Medical Engineering, Computational Engineering, Data Science, Robotics, Quantum Science and Technology, Tech MBA.

Stipend: 5333 Pounds Monthly+Accommodation

Link To Video Fundaes:

<https://drive.google.com/file/d/1OMAyZy6ZL7zj9DnLj56WuWiTp9spSuKz/view?usp=sharing>

Optiver

Profile : Financial Trading

About Optiver

Optiver is an industry leader across everything we do. We don't just meet industry standards, we aim to set them! With trading teams focusing on a broad range of options and delta1 products we are able to provide an unrivaled universe of exciting opportunities for our employees. Through our core function as a market-maker we continuously improve the market by being the source of liquidity for market participants

Job Description

Trading Internship 2022 (Amsterdam)

As a Trader Intern at Optiver in Amsterdam you will be given full insight into what it takes to be a trader at our company and based on your performance could receive an offer to return at the end of your studies.

If you are in your penultimate year of university, have excellent analytical skills and a passion to prove yourself then you could be the Trader Intern we are looking for.

What you'll need

- Penultimate year student in Mathematics, Physics, Computer Science, Engineering, Finance or equivalent, with ability to work full-time upon graduation in 2023
- Excellent numerical and analytical skills
- A pro-active problem solving nature
- Fast decision making skills under pressure
- Competitive attitude and eagerness to constantly improve yourself
- Great attention to detail
- Computer programming skills are not required but definitely a plus
- Fluency in English (Dutch is not required)

What you'll get

- An 8 -9 week internship (May & June 2022) working alongside best-in-class professionals from over 40 different countries
- Competitive salary: €6250 per month
- Fully furnished apartment in the city center of Amsterdam
- Awesome social events and outings
- Free breakfast, lunch and dinner provided at Optiver, weekly massages & a bicycle to explore Amsterdam
- Most importantly, the possibility to receive a full-time offer upon completion of internship, to an office of your choice (Amsterdam or Sydney)

Want to find out more?

You can also learn more about what it would be like to be a trader at Optiver here, or have a look inside our Amsterdam office!

Shortlisting Process: Test, GD, Interview

CGPA Cutoff : NIL

Test : Yes

Topics asked: Mental math, cognitive ability, numerical reasoning, verbal reasoning, Probability, guesstimates, puzzles

Sample questions:

- Find no of trees in the amazon rainforest
- Value of gold medals that can fit in a swimming pool
- Ted ed's black and white hat puzzle
- Wizard standoff puzzle

GD: Yes

- GD Topics : Market making, probability, HR
- Number of people in GD : More than 5
- Companies expectation : Teamwork, collaborative thinking, appropriate measures for guesstimate, probability problem solving

No of interview rounds - 1 Technical round + 1 HR round

Interview:

Round 1:

- Expected Value of sum of cards
- What would the price of 1\$ in Amazon's IPO be worth now
- Pick 4 cards, drop lowest, expected value? pick 3 cards, swap lowest, expected value? which is higher?
- Any situation that you evolved out of, do 7/13 in your head, speed questions like morning or night, etc

Round 2 (HR Round) :

- Travel experience summary
- What is your biggest failure in life?

Suggestions:

- Do not panic. Do not get stressed out. This is entirely a stress test and they want to know if you can stay calm under pressure or do you crack.
- 15 seconds is long enough to solve the question they give you if they expect an exact answer else they expect only an estimate so you just have to make approximations.
- Do not worry about wrong answers and focus on the next question.
- Don't interrupt the interviewer when he gives hints, and do a mock interview with a friend.

Preparation Material:

- Optiver gives a guide
- As a part of prep for Optiver, the only must solved are maybe Heard on the Street and 50 problem in probability
- I would say books and websites on probability as well as mental mathematics
- Trading jobs.net - 80 questions in 8 mins (Refer to Bluebook video for more)

Open for:

- Btech: All
- Dual Degree: All
- IDDD : Advanced Materials and Nanotechnology, Bio-Medical Engineering, Computational Engineering, Data Science, Robotics, Quantum Science and Technology, Tech MBA.

Stipend: 5333 pounds monthly+accommodation

Link To Video Fundaes:

https://drive.google.com/file/d/1DgPCcj3wHklHpUIMtiW_bUP0Zkmyf4KR/view?usp=sharing

Rubrik

Profile : Software Engineer

About Rubrik

Rubrik, the Zero Trust Data Security Company™, delivers data security and operational resilience for enterprises. Rubrik's big idea is to provide data security and data protection on a single platform, including: Zero Trust Data Protection, ransomware investigation, incident containment, sensitive data discovery, and orchestrated application recovery. This means data is ready at all times so you can recover the data you need, and avoid paying a ransom. Because when you secure your data, you secure your applications, and you secure your business.

Job Description

We are looking for a Software Engineer Intern to join our team. We believe in giving engineers responsibility, not tasks. Our goal is to motivate and challenge people to do their best work. To do that, we have a very fluid structure and give people the flexibility to work on projects that they enjoy the most. This develops more capable engineers and keeps everyone engaged and happy.

Responsibilities:

Design, develop, test, deploy, maintain and improve the software.

Manage individual projects priorities, deadlines, and deliverables with your technical expertise.

Identify and solve bottlenecks within our software stack.

Shortlisting Process: Resume Shortlist, Test, Interview

CGPA Cutoff : 8 and above

Test : Yes, 1 hour 30 mins

GD: No

No of interview rounds - 3

Interview:

Round 1:

- Technical - One question per each interview round.
- The questions are based on graph theory.

Round 2:

- Technical - One question per each interview round.
- The questions are based on graph theory.
- During both the rounds of interviews be sure of thinking loud even if you don't reach the final answer you can still get the logic and approach right.

Round 3:

- HR round
- The focus was on projects and the role of the candidate in the project and how well the candidate knows about the project.
- The questions were trying to understand the candidate's contribution and attitude towards working in a team.

Suggestions:

- This role is clearly for coding enthusiasts, so you need to be good at coding.
- There were difficult questions from graph theory in the previous year's test so you might want to brush up those concepts.
- There were slightly twisted standard questions from DSA and one should answer those to do well in the test.
- For HR rounds go through recent news articles about the company.

Preparation Material:

- Codeforces and Leetcode for competitive coding
- Leetcode for DSA
- Graph theory

Open for:

- BTech: Computer Science & Engg
- Dual Degree: Computer Science & Engg
- MTech : Computer Science

Stipend: 165000 Monthly

Link To Video Fundaes:

https://drive.google.com/file/d/1zCe_WX8cMXXR9FD-pSXhXL1YrP830xtx/view?usp=sharing

Salesforce

Profile : Software Engineering

About Salesforce:

Salesforce is a world leader in enterprise cloud computing. It delivers solutions to their customers 3 times a year through their leading CRM(Customer Relationship Management) platform. It provides customer relationship management software and applications focused on sales, customer service, marketing automation, analytics, and application development.

Job Description:

Intern - Software Engineer (2021-22)

Location: Hyderabad/Bangalore, India

This is your time to shine and be part of Salesforce, a world leader in enterprise cloud computing. We deliver innovations to our customers 3 times a year through our leading CRM platform through agile practices. As a software engineering intern you will get to contribute right away as a member of one of our Scrum teams to one or more software engineering aspects into the future releases. You will get to be part of the one or more aspects of the engineering lifecycle of tools and/ or features that enable our solutions to reach millions of end users and enterprises who use our mission critical applications and services everyday to run their business. We also look to you to help deliver high quality software through automated testing, and own your service in production with real-time monitoring tools and frameworks.

Responsibilities include but not limited to:

- Implement code fixes under the direction of software architects and senior developers
- Develop well-tuned code that may be included as part of our next software release
- Contribute to our suite of automated tests and testing infrastructure
- Contribute to tools and solutions to support and monitor our various cloud services

Eligibility Criteria:

- Enrolled in sophomore year or higher at a college/university or any year at a graduate school
- Working towards a B.E/ B.Tech in Computer Science, Information Technology and Circuit Branch graduating in 2023

Required Skills:

- Academic or professional/internship
- Ability to quickly learn new technologies

- Strong analytical and problem-solving skills
- Be a self-starter and possess strong sense of self-motivation

Desired Skills:

- Experience with programming languages such as Java, C++ or Python
- Understanding of object-oriented programming/design
- Working knowledge of HTML and web technologies
- Coursework in SQL and relational database concepts
- Strong competency in Java language, javascript and associated frameworks
- Strong skills in Data Structures, OOPS Concept and Algorithms

Shortlisting Process: Resume shortlist, Test, Interview

CGPA Cutoff : Nil

Test : Yes.

Mainly questions from Data Structures and Algorithms were asked. Some sample questions were: 1)Generate all common prefixes and suffixes and 2) Given a NxN matrix. Find the maximum element in each submatrix of size KxK.

General problem solving questions using concepts like greedy, dynamic programming

GD: No.

No of interview rounds - 2(Technical) +1 (HR)

Interview:

Round 1:

- They began with introductions, asked about a project in the resume, then gave a question to solve, on the hackerrank interviewing platform. Question can be considered to be Dynamic Programming based.
- The question was: given an array, output an array with: for each index, the corresponding output element should be the product of all elements except the one at i.
- Topic may be dynamic programming (there are a few ways to approach this - which was discussed with the interviewer, but the dynamic way considers overflow simply)

Round 2:

- A question: You are given an amount m (floating point), and an array of toys, each of which is a tuple of a string - its name, and a float - its cost. Output the names alongside the costs for the largest set of toys you can buy with the amount.

Round 3: HR

- What do you already know about Salesforce?
- (context: a team which I lead where we discuss and modify policies) Have there been times when someone's opinion differed from yours or there were objections raised? How did you handle them?"
- (context: I attempted to deploy a website on Azure as well as AWS) Why would you do so?
- (context: a website which will be public but will have some insti-specific pages) How can you identify insti- and non-insti- traffic? Via logins primarily, but traffic can also be sieved via IP; follow-up: Why IP? Are IP addresses fixed?
- Was there a time when you had to take charge of a situation, where no one else would?
- (context: I'm involved in the gamedev club, and speak passionately of it) Even if you joined Salesforce, wouldn't you be better off pursuing gamedev as a career?
-

Suggestions:

- If you've not heard of Salesforce before, do take a look at force.com (must), the wiki page, the values - trust, equality, 1-1-1 model, etc. It's one of the best companies to work for, and the interviewers took pride in mentioning that.
- About the pressure: knowing how many companies come after Day 1 could help cope. Didn't know so many were going to come.
- Be thorough with whatever you've written in your resume like projects etc.
- Please don't cheat. Not here.
- starting DSA as early as possible (preferably just after the 3rd sem) because when companies' tests begin, students sometimes feel that they should have practiced more questions, which creates some pressure at the end.
- Have a mock interview or two with some friends.

Preparation Material:

- Geeksforgeeks and a YouTube channel (Michael Sambol) for quick reference of algorithms. Only reference, not learning.
- DSA concepts - Udemy / GeeksForGeeks.
- Sites like Hackerrank, codechef, codeforces, CSES etc. for problem solving.

Open for:

- Btech:
Computer Science & Engg , Electrical Engg, Engineering Physics
- Dual Degree:
Computer Science & Engg, Electrical Engg

Stipend: 90000 Monthly

Link To Video Fundaes:

https://drive.google.com/drive/folders/1yHXHzKtoTT0X6Ai82CS3OMea_agvOcTa?usp=sharing

Sprinklr

Profile : Software Engineering

About Sprinklr: Sprinklr is the unified platform for all customer-facing functions. We call it unified customer experience management (Unified-CXM). We help companies deliver human experiences to every customer, every time, across any modern channel, at a once impossible scale.

Job Description

Software engineering - allotted to backend, frontend, UI, mobile or ML based on experience and preference during interview.

Sprinklr is looking for Interns who can develop massively scalable, distributed software systems built on strong competencies in data structures and algorithms. So, if you desire to create and implement full product life cycles, and code solutions that involve research and interactivity, Sprinklr is the best workplace to be in.

Shortlisting Process: Resume shortlist, test, 3 interviews

CGPA Cutoff : NA

Test : 3 DSA questions

GD: NA

No of interview rounds - 2 technical rounds, 1 HR round

Interview:

Technical Round:

- DP is very important. Some advanced data structures were also covered.
- Be prepared to explain ML projects in your resume.

HR Round:

- Prepare for the HR round close to the interview.
- Express your interest in the company.
- Don't ask details covered in PPT.

Suggestions:

- Start preparation early if you are from non-circuitual branches.
- Be thorough with whatever you mention in your resume.

Preparation Material:

- HackerRank, Leetcode, Geeks for Geeks, InterviewBit, etc
- Competitive programming
- Basic OOP concepts
- Cracking the coding interview book
- Must do problems of product based companies
- CS2700, CS2800, CS2810 courses from insti or NPTEL course on DSA

Open for:

- Btech: All
- Dual Degree: All

Stipend: INR 200000/month

Link To Video Fundaes:

https://drive.google.com/file/d/1IAle9UIYiOz2-I9M1ASFwl3O_Cbyug4u/view?usp=sharing

Standard Chartered GBS

Profile : Software Engineer

About Standard Chartered GBS

We are a leading international bank focused on helping people and companies prosper across Asia, Africa, and the Middle East. With more than 86,000 employees from 125 different countries around the world, we are strong believers of getting the right talents with diverse ideas, cultures, and backgrounds to build better products and services.

We are changing the way we do business – becoming a digital bank with a human touch. This is your opportunity to be part of a growth story in an industry that is reimagining how customers are getting better, faster experiences and convenience through digital technology.

To us, good performance is about much more than turning a profit. It's about showing how you embody our valued behaviors - do the right thing, better together, and never settle - as well as our brand promise, Here for good.

We're committed to promoting equality in the workplace and creating an inclusive and flexible culture.

Job Description:

Roles and Responsibilities

- Analyze complex business problems and help arrive at technically innovative solutions
- Designing user interactions on web pages
- Developing back-end website applications
- Developing front-end website architecture
- Automation of test suite using Selenium
- Identifying performance gaps in applications and tuning code to achieve desired performance goals
- Collaborate with globally distributed agile teams

Core Competencies

1. Desired competencies

- Proven ability that establish a strong team-player approach to problem solving

- Strong foundational knowledge of Algorithms, Data Structures, OOPs concepts, and frameworks.
- Curious learner, willing to learn and adapt to new technologies and frameworks
- Empowered mindset with the ability to ask questions and seek clarifications
- Excellent communication skills that enable seamless interactions with colleagues globally
- Strong analytical skills and impeccable attention to details
- Excellent verbal and written communication skills
- Highly enthusiastic individual and considered a go-getter
- Strong networking and interpersonal skills
- Ability to work with teams spread across global locations

2. Preferred competencies

- Certification from reputed development communities
- Participation in Hackathons.
- Contribution to open source communities
- Innovative projects developed and showcased

Shortlisting Process: Test, Interview

CGPA Cutoff : Nil

Test :

Round 1: Psychometric Test : Showed 14/15 videos and questions were asked based on them.

Round 2: Coding Test : Questions were on basic stuff like strings, dynamic programming etc.

GD: No

No of interview rounds - 2 (technical) + 1 (hr)

Interview:

Questions based on the resume were asked in the technical rounds.

1. What is the most important part of the MERN stack?
2. How did you manage to solve edge cases in this payment system?

3. Being from Civil Engineering, how did you come to this line of software engineering?
4. How did you overcome certain problems during your PoR and prior internships? (HR)

Suggestions:

- Don't lose confidence
- Try to aim for a single profile and focus on that.
- Don't waste your time and practice DSA and problem solving questions
- Stick to one platform and one language
- Try to solve problems on the platforms that companies are likely to organize the test, like Hackerrank , Hackerearth, etc.
- Try to be really good at atleast one of these : Java, C, C++, Python.

Preparation Material:

- LeetCode and GFG (GeeksForGeeks)
- InterviewBit

Open for:

- Btech: All
- Dual Degree: All

Stipend: 40000 Monthly

Link To Video Fundaes:

<https://drive.google.com/drive/folders/1EzYnr6dS4R4enWwDHTz96BKON9BF52jC?usp=sharing>

Texas Instruments

Profile : Analog

About Texas Instruments

Texas Instruments Incorporated is an American technology company that designs and manufactures

semiconductors and various integrated circuits. TI is one of the top-10 semiconductor companies

worldwide, based on sales volume and is focused on developing analog chips and embedded processors, which account for more than 80% of their revenue. TI has been a pioneer in many innovations in the semiconductor domain including the development of the first integrated circuit; the first patent on a single-chip microprocessor, the first single-chip linear predictive coding speech synthesizer, developing prototype of the world's first transistor radio and the invention of the digital light processing device (also known as the DLP chip), which serves as the foundation for the award-winning DLP technology and DLP Cinema (used in IMAX theaters).

TI India was set up in 1985 and has R&D presence for all the major business units of TI including Analog - (Data Converters, Amplifiers, Clocks & Synthesizers, Motor Drives, Power Management) and Embedded Processors (Connected Microcontrollers, Radar, ADAS- Advanced Driver Assistance and Infotainment Processors etc.) and caters to products for different market segments - Industrial, automotive, personal Electronics, Communication and Enterprise. The internship will give you a flavor of the real work at TI. You would be assigned to a real time project where in your deliverables will be feed in to the deliverables of your team. You would be assigned a mentor who would work very closely with you and guide you through the entire process.

To know more about TI, visit www.ti.com

Job Description

The internship will give you a flavor of the real work at TI. You would be assigned to a real time project where your deliverables will be feed in to the deliverables of your team. You would be assigned a mentor who would work very closely with you and guide you through the entire process. You will have the opportunity to work in one of the many exciting areas that TI works on like wireless infrastructure, audio, energy automation, electronic point of service, industrial automation, infotainment, ADAS, medical imaging, high speed interface, clocks and synthesizers, automotive, storage, power supply, battery management, linear power, DLP and many more.

Some projects that Analog Engineering interns have done in the past:

- Design of FPGA based modular ADC data capture solution
 - Elliptical filter design for a passband of 3.4 GHz to 3.8 GHz with a notch at 2.949 GHz
 - MATLAB based music efficiency calculator
 - Evaluation of machine learning algorithms to replace output LUTs for non linear ADC
 - Efficiency calculator for Music Files
-
- working on helping to design PDKs and CAD tools for design and fabrication. Mainly in geometric modelling of the wafers/circuits and verification for any faults.
 - Optimization of existing designs of AFE IC , ex. Optimization of AFE for noise reduction
 - Project related to ADCs, DACs, Voltage regulators, machine learning algorithms

Shortlisting Process: Resume shortlist, Test, Interview

CGPA Cutoff : No particular cgpa shortlist. CGPA >7 should be safe

Test :

Test has problems related to transistors, analog circuits and RC circuits. Strong basics in Analog circuits course helps a lot.

More questions were asked on analog circuits with MOSFETS, some questions on calculating bandwidth and some questions on RC circuits were asked.

GD: no

No of interview rounds - 2

Interview:

Very basic compared to tests

Round 1: Technical

- They gave a RC circuit and asked to explain its working
- Questions on MOSFET from analog circuits course
- Basic questions like what will happen if you give step input for an op amp, how the output waveforms will look like for a given circuit depending on whether you give step input or triangular input.
- General tips: Explain whatever you are thinking and keep talking. Even if you are wrong, they will guide you in the right direction. Don't stay silent. Be thorough with basics and explain well.

Round 2: HR

- Was just a phone call from HR asking why you were interested in working in TI

Round 3:

- NA

Suggestions:

- Revise Basic circuit theory, Analog systems and Analog circuits, Analog IC Design
- Prepare on and gain an intuitive understanding of RLC circuits
- very basic coding in c/c++/python would be helpful

Preparation Material:

- Recorded lectures in ics website, Morris and Mano for digital and basics of RC circuits/digital CMOS circuits
- Nagendra's lectures for electric circuits course
- Course material for Analog system and Analog circuits
- Yt lecture series on analog circuit design by Caltech professor

Open for:

- Btech:
 - * Electrical Engg
 - * Engineering Physics
- Dual Degree:
 - * Electrical Engg

Stipend:

45000 Monthly

Link To Video Fundaes:

<https://drive.google.com/file/d/15B57xqfxHCTukOQNNKK4DeRSftHH3j3i/view?usp=sharing>

Uber

Profile: Software Engg

About Uber:

We're changing the way people think about transportation. Not that long ago we were just an app to request premium black cars in a few metropolitan areas. Now we're a part of the logistical fabric of more than 600 cities around the world. Whether it's a ride or a sandwich, we use technology to give people what they want, when they want it.

For the people who drive with Uber, our app represents a flexible new way to earn money. For cities, we help strengthen local economies, improve access to transportation, and make streets safer.

And that's just what we're doing today. We're thinking about the future, too. With teams working on self-driving cars and flying vehicles, we're in for the long haul. We're reimagining how people and things move from one place to the next.

We're bringing Uber to every major city in the world. We need your skills and passion to help make it happen! Be sure to check out the [Uber Engineering Blog](#) to learn more about the team.

Uber is an equal opportunity employer and enthusiastically encourages people from a wide variety of backgrounds and experiences to apply. We don't discriminate on the basis of race, color, religion, sex (including pregnancy), gender, national origin, citizenship, age, mental or physical disability, veteran status, marital status, sexual orientation or any other basis prohibited by law.

Job Description:

About the Role

As an Uber Intern, you'll have a direct impact on the customer experience for both riders and drivers. Do you like our service and want to bring them to the next level? Do you have a beef with our app and want to fix it? Then you should apply to join our team. We are ambitious, engaged and excited about disrupting the transportation industry across the world. Not just another social web app: we are moving real assets and real people around their cities. Outside of your work, you will build meaningful relationships with other Interns and Uber mentors through a variety of summer activities.

If you meet these criteria, we welcome you to apply.

Qualifications and Desired Skills

- Actively pursuing a B.Tech or Integrated Dual Degree (anticipated graduation in 2022) in Computer Science, Electronics Eng, Electrical Engineering, Mechanical or Mathematical Sciences or related fields
- Demonstrated software engineering experience through previous internships, work experience, coding competitions, and/or publications
- Programming experience one or more application or systems languages (Go, Python, Ruby, Java, C/C++, etc)
- Interest in building tools/infrastructure

- A desire to be part of a team that delivers impactful results every day
- A commitment to writing understandable, maintainable, and reusable software
- An innate desire to deliver and a strong sense of accountability for your work
- Willingness to learn new languages and methodologies

Shortlisting Process: Test, Interview

CGPA Cutoff : Nil

Test :

- 3 questions in the test(1 hour). Students were free to choose the language.
- First question was to convert a 100 bit binary no to base 6.
- Second question was essentially to find the number of subsequences of an array of length ($n \leq 60$) whose $\text{gcd} \neq 1$ which can be solved using dynamic programming
- Third was a straightforward knapsack problem.

GD: No

No of interview rounds - 2 (technical) + 1 (hr)

Interview:

- Both the technical rounds were coding based.
- They were asked to code live and questions were asked based on them.
- Topics like dynamic programming, binary trees were tested on.

Suggestions:

- Try to do more live contests as it helps with time constraints.
- Go prepared for the HR round.
- Do company based previous year questions.

Preparation Material:

- Codeforces and Codechef contests
- Solved past questions asked by companies from gfg,leetcode,interviewbit

Open for:

- Btech: All
- Dual Degree: All

Stipend: 160000 Monthly

Link To Video Fundaes:

<https://drive.google.com/drive/folders/1yc9Oxc7OzJ1wvcDtP-897k7xfapLCRTA?usp=sharing>

Wells Fargo

Profile : Technology Development

About Wells Fargo

Wells Fargo is a leading global financial services company headquartered in San Francisco (United States). Our business outside of the U.S. mostly focuses on providing banking services for large corporate, government and financial institution clients. We have worldwide expertise and services to help our customers improve earnings, manage risk, and develop opportunities in the global marketplace. Wells Fargo India enables global talent capabilities for Wells Fargo Bank NA., by supporting business lines and staff functions across Technology, Operations, Risk, Audit, Process Excellence, Automation and Product, Analytics and Modeling.

Job Description

Software development, Machine Learning

- Design, develop and test software engineering solutions to perform at scale
- Maintain reusable and reliable code and test coverage leveraging appropriate tools
- Ensure the best possible performance, quality, and responsiveness of applications
- Identify application related bottlenecks and bugs, and devise solutions to mitigate and address these issues
- Demonstrate understanding of Business Continuity Planning, quality, security and compliance requirements for supported areas
- Adhere to the coding standards and contribute to various aspects of application development such as robustness, scalability, simplification and automation
- Interact with multiple stakeholders across locations to achieve the desired goal

Shortlisting Process: Shortlist based on test, interview

CGPA Cutoff : NA

Test : DSA, Aptitude, Quant, English

No of interview rounds - 1 (technical and HR combined)

Interview:

Round 1:

- Both technical and HR questions
- Basics of DSA, some problems

Suggestions:

- Be relaxed

- Be confident about points mentioned in resume
- Strong basics
- Start preparation as early as possible

Preparation Material:

- InterviewBit, Geeks for Geeks
- Data Structures and Algorithm courses
- Codechef and codeforces contests
- 10xITian

Open for:

- Btech: All
- Dual Degree: All

Stipend: INR 120000/month

Link To Video Fundaes:

https://drive.google.com/file/d/1sNF1bSOtl0w1oJa0OVQbNskHOc8gtUZ_/view?usp=sharing

Wipro

Profile : Core

About Wipro:

Wipro Limited (formerly, Western India Palm Refined Oils Limited) is an Indian multinational corporation that provides information technology, consulting and business process services. Thierry Delaporte has served as CEO and managing director of Wipro since July 2020. It is headquartered in Bangalore, Karnataka, India.

Job Description:

Relevant live projects basis the requirement of organization during the internship period
Location: Factory Locations Across India (Maharashtra, Himachal Pradesh, Karnataka, Uttarakhand, Tamil Nadu, Andhra Pradesh, Telangana etc.)

Shortlisting Process: Resume shortlist, Test, Interview

CGPA Cutoff : 8

Test : Yes.

Test had four sections of which English, aptitude and math were time-detested (each section is to be attempted in 20 minutes) and the last to test you as a person and this was not time-detested.

GD: No.

No of interview rounds - 2

Interview:

Round 1:

- They began with introductions, asked about a project in the resume and the questions mostly revolved around the points mentioned in the resume.
- Questions are mainly focussed on the technical aspects mentioned in the resumes.
- Managerial questions are asked to test your teamwork and leadership skills
- The question was: given an array, output an array with: for each index, the corresponding output element should be the product of all elements except the one at i.
- They raised lot of questions on the POR's you done by the students
- Sample Questions asked during Interviews:
What is your family background?
Tell me about your hobbies?
Why wipro? And Why core?

And other HR related questions.

Suggestions:

- Never mention Higher studies or research in the interview.
- Take enough time to build your resume.
- Be thorough with whatever you've written in your resume like projects etc.
- They expect you to be really honest. Please don't cheat. Not here.
- Prepare some good questions to ask them at the end if they ask, This will end the interview in a nice tone
- Have a mock interview or two with some friends.

Preparation Material:

- 64 HR questions
- Heard on the street
- Search for sites to practice aptitude.

Open for:

- Btech: Mechanical Engineering

Stipend: 85000 Total duration + 15000 Accommodation

Link To Video Fundaes:

<https://drive.google.com/drive/folders/1h35kTOldhatlda3YAqUKLVdAUttXQYFI?usp=sharing>

Wipro

Profile : FMCG

Job Description:

Relevant live projects basis the requirement of organization during the internship period

Location: Factory Locations Across India (Maharashtra, Himachal Pradesh, Karnataka, Uttarakhand, Tamil Nadu, Andhra Pradesh, Telangana etc.)

Shortlisting Process: Resume shortlist, Test, Interview

CGPA Cutoff : 8

Test : Yes.

Test had four sections of which English, aptitude and math were time-detested (each section is to be attempted in 20 minutes) and the last to test you as a person and this was not time-detested.

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 - What is your family background?
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Preparation Material:

- 64 HR questions
- Heard on the street
- Search for sites to practice aptitude.

Open for:

- Btech: Mechanical Engineering

Stipend: 85000 Total duration + 15000 Accommodation

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WorldQuant

Profile : Quantitative Researcher

About WorldQuant

WorldQuant is a hedge fund and a quantitative investment management firm headquartered in Old Greenwich, Connecticut. Founded in 2007 by Igor Tulchinsky with the belief that talent is global, but opportunity is not, WorldQuant has more than 750 employees spread among 24 offices in 15 countries. WorldQuant seeks to get to the future faster, guided by the principle that there are an infinite number of insights to discover. The firm develops and deploys investment strategies across a variety of asset classes in global markets. It basically has two sectors: research and trading. The research sector comes up with mathematical models that help them in trading.

Job Description:

The Role (include, but is not limited to the following):

Our research subsidiary in India is seeking electrical engineering, physics, computer science, mathematics, financial engineering or any other related field majors for a quantitative researcher intern position. The goal of our internship program is to offer talented candidates a chance to learn about applications of quantitative analysis and software development to the financial markets. Specifically, interns will work closely with quantitative researchers/developers to:

- Research financial literature to identify novel ideas and build Alphas to test them.
- Create tools for the analysis of financial market data and to increase efficiency in the development of Alphas.

Its Impact: The internship program lasts 10 weeks and takes place at our Delhi / Mumbai office. Apart from gaining valuable hands-on experience on real-world projects, successful candidates have a chance to attend numerous company events, including social activities and research seminars. In addition, our friendly and collegial working environment gives interns an opportunity to interact closely with our group of highly accomplished staff and to learn more about the firm as a whole.

What You'll Bring:

- A bachelor's, master's, or Ph.D. degree from a leading university in a highly analytical field, such as Electrical Engineering, Physics, Computer Science, Mathematics, Financial Engineering or any other related field that is highly analytical and quantitative.
- Undergraduate or graduate students with approximately one year remaining in their academic programs.
- GPA score above 8 is required

- Have a research scientist mind-set, i.e., be a deep thinker, creative, persevering, smart, a self-starter, etc.
- Be competent in a programming language (C++ or C) and a scripting language (Perl or Python).
- Have a strong interest in learning about worldwide financial markets.

Shortlisting Process: Test , Interview

CGPA Cutoff : 8.5

Test :

- Around 3 hours long. [There was enough time to answer the questions].
- Questions were all basic ones and topics included math and DSA(time complexity etc.)

GD: No

No of interview rounds - 2

Interview:

Round 1:

- Around 40 minutes long.
- Started with some basic questions on Python and OOP concepts.
- “Difference between list and array” , “Difference between tree and graph” etc.
- Two probability questions:
 1. Probability of winning a tennis game in two sets/three sets and how does it differ when both the players have unequal chances of winning.
 2. A question about three balls and a square. Probability of keeping the three balls at the three different vertices of the square if any vertice can contain any number of balls.
- Machine learning questions on linear regression etc.
- Around 10 minutes towards the end for discussing resume points.(same for Round 2 also.)

Round 2:

- 3 puzzles were asked , which was all based on probability or aptitude.
- The two questions were easy and the third one was tricky because they had to focus on the exact “wording” given by the interviewer.
- Some questions on finance like “what do you understand about alpha?”

Suggestions:

- Read some basic stuff about finance before the interviews like the definition and importance of alpha, mathematical modeling etc.
- They are likely to take people who are enthusiastic about research so either have strong research points in the resume or talk to the interviewer about your interest in it.
- Focus more on probability and DSA for preparation.

Preparation Material:

- “Heard on the Street”, Timothy Falcon
- “Fifty Challenging Problems in Probability with Solutions”, Frederick Mosteller
- Leetcode for DSA.[Enough for WorldQuant as they only ask basic questions.]

Open for:

- Btech: All
- Dual Degree: All

Stipend: 60000 Monthly

Link To Video Fundaes:

<https://drive.google.com/drive/folders/1yIN8kyZesaOY29iT8f18wDgKZSv1b-cK?usp=sharing>