

# ION Trading Placement Drive



Date : 22<sup>th</sup> August, 2018

## About

We're visionary innovators who are delivering mission-critical trading and workflow automation software to financial institutions, corporations, central banks, and governments. By combining our passion for automation with a strategic view on the industries we serve, we design solutions that improve decision-making, simplify complex processes, and empower people. Simply put, we help our customers do more, faster and better than before. We believe our investments in research and development are shaping the future of automation and enabling our customers to transform their business. And we embrace the power of community, working with each other and with our customers to succeed through a positive culture of continuous improvement.

## Job Description

**Profile :** Software Developer, Business analyst and Client Service Analysts ( FTE )

### **Roles and Responsibilities :**

Software Developer – gain expertise in software architecture, design, coding, testing and dev ops.

Functional (Business) Analyst – gain expertise in business domain, mapping customer need to solution, product positioning and strategy

Client Services Analysts – gain expertise in managing customer engagements, product deployments, solving time critical customer issues and producing analytics from usage of our products.

As a rotational product developer, you'll start with a 1.5-month induction to learn about our culture, business and technology.

This will be followed by a rotational program where you'll work hands-on in a series of teams, in a role depending on one of the following specializations we select together for you

## Eligibility

Branches: CSE | ECE | CCE

Eligibility: CGPA  $\geq 6$  and no active backlogs

## Procedure

1. Online Test
2. Pre Placement Talk
3. On Campus Interview (1)
4. Selection day at ION Office

## Result

No. of FTE Selections : 5

Candidate : **Uma Bhatia, Gaurav Adaisani, Akshay Maheshwari, Himesh Jain, Sukurati Jain**

## Feedback by Comapany

Positive attitude, good inter personal skill and willingness to learn. LNMIIT student are equally positioned to other elite institutes. They may not invest so heavily in preparing for interviews instead spend time on learning

# Interview Experience 1

By :- Uma Bhatia

## 1st Round: Online Test

Comprised of 5 sections:

- Logical Aptitude
- Quantitative Aptitude
- English Comprehension
- Business Analysis (comprised mostly of data interpretation questions)
- Coding
- Given two numbers find if they are in gray code or not
- Print the triangular series for a given number

## 2nd Round: On Campus Interview

General introduction followed by interests and hobbies.

2 puzzles:

- In a newspaper orientation comprising of 64 pages and 16 sheets, what will be the page numbers of the sheet having page number 45?
- The probability of a car passing a certain intersection in a 20 minute windows is 0.9. What is the probability of a car passing the intersection in a 5 minute window?

## 3rd Round: ION Day

- Group Tasks: All the participants were divided in groups of 6 and then the following group tasks were given while the interviewers observed various team skills
  - a. A packet of marshmallows, spaghetti sticks, thread, sellotape and scissors were given and we were supposed to build the highest possible tower and the only condition was that there should be a marshmallow at the top.
  - b. 12 pictures of puzzle series were divided amongst all the team members and they were supposed to come up with the correct sequence without looking at another's pictures.

**Case Study and F2F** : A case study was given to handle a particular business situation and then discussion was done on it in the face to face interview.

- It was followed by technical interview:
  - Priority Queues
  - Booting process when the computer starts
  - Sorting
  - Threads and Processes
  - Questions on projects in the resume
- Leadership Round : The aptitude towards technology and learning new things was tested.
- What is your favourite product?
- Draw the evolution stages of that product.
- Asked 'why' of each stage.

**HR Round** : It was a face to face interview with the Company Head preceded by a form which had questions like 'why ION?', 'strengths and weaknesses', 'any higher studies plans', etc.

- What would you like us to know about yourself?
- How did you like ION recruitment process?
- Have you ever participated in any public speaking activities?



# Interview Experience 2

**By :- Sukrati Jain**

## **Round 1: Online Test**

This round consists of several sections like logical reasoning , aptitude , English , Business Analyst and Automata . All sections are mandatory. Automata section has 2 coding questions.

Question 1 - Multiply Matrix with its transpose

Question 2 - Given two trees , find whether the one is a subtree of other or not.

## **Round 2: f2f**

Started with questions on resume. Followed by 2 puzzles and ended with some questions on ion like what are your views on rotational product developer program, how many Ion offices are there in India etc.

Puzzle 1- There are 3 boxes, all boxes are labeled incorrectly. One box contains apples , one contains oranges and one contains mixture of both oranges and apples. You can pick only one fruit from one of the three boxes. Find the correct label of each box?

Puzzle 2- There are 100 doors in a row, all doors are initially closed. A person walks through all doors multiple times and toggle (if open then close, if close then open) them in following way:

In first pass, the person toggles every door

In second pass, the person toggles every second door, i.e., 2nd, 4th, 6th, 8th, ...

In third pass, the person toggles every third door, i.e. 3rd, 6th 9th, ... and so on.

After 100th pass, what is the position of 15th door and which doors are open in the end?

Round 3 : Group activity (no elimination)

First two rounds were conducted in college, rest of the rounds were conducted in their Noida office .

There were students from many colleges. A group of around six people was formed. Two group activities were organized.

**Group activity 1(20 mins) :** Construct a tower of maximum height using marshmallows and spaghetti.

Group activity 2(20 mins) : They gave two pictures to everyone. One cannot see the pictures of other teammates. Explain your picture to your teammates and try to make a proper sequence by combining the pictures of all members of team.

## **Round 4: f2f**

A case study is given on graduate recruitment process. Analyse it for 20 mins and find solutions to problems. After 20 mins a face to face round was conducted in which case study was discussed thoroughly. Later they asked questions on resume and some other technical questions related to time complexity and data structures.

## **Round 5: f2f**

Interviewer asked questions about Ion like what all Ion do, who are its customers etc. Later asked about my favorite product and followed by questions on functionalities of that product, how I will start building it etc. He also showed some picture and asked questions on it. Basically he is trying to judge how we think according to customer's point of view.

## **Round 6: f2f (HR round)**

Interviewer asked very basic questions like define yourself, views on Ion day, preferred work location etc. This round continued for about 5-6 mins.



# Interview Experience 3

By :- Himesh Jain

Rounds

## Group Activity Round

- Tower Building Using Spaghetti, Marshmallow, String, Tape  
Build the tallest structure with a condition (a Marshmallow on top)
- Form the picture  
Each team member is given 2 pictures in private  
Need to figure out the order through discussion

## Case Study + Technical Round

- Case Study  
Employee Shift Management as the case study

## Technical Round

- Convert your solution to case study into a program
- Basic Questions about OOP concepts
- COA related questions about why Moore's Law is failing, Hyperthreading
- Some JS related questions like scoping (var, let), asked as I have worked mostly with JS.
- Leadership Round

## HR round

- What do you make of a shown picture
- Two ways of doing a thing are shown, what do you think is better.
- What lead the innovation, i.e what were the factors making cameras move from one technology to another, looked for answers like (Cost, Speed, Storage, Internet)
- Interview with Region Head

# Question Bank

## Puzzle based questions:

1. Sock Drawer: There are 10 black and 10 white socks. How many tries you need to pull out to make sure that you will have a matching pair.
2. You have 240 barrels of wine, one of which has been poisoned. After drinking the poisoned wine, one dies within 24 hours. You have 5 slaves whom you are willing to sacrifice in order to determine which barrel contains the poisoned wine. How do you achieve this in 48 hours?
3. There is a basket full of hats. 3 of them are white and 2 of them are black. There are 3 men Tom, Tim, and Jim. They each take a hat out of the basket and put it on their heads without seeing the hat they selected or the hats the other men selected. The men arrange themselves so Tom can see Tim and Jim's hats, Tim can see Jim's hat, and Jim can see anyone's hat. Tom is asked what color his hat is and he says he doesn't know. Tim is asked the same question, and he also doesn't know. Finally, Jim is asked the question, and he does know. What color is his hat?
4. A pot contains 75 white beans and 150 black ones. Next to the pot is a large pile of black beans. A somewhat demented cook removes the beans from the pot, one at a time, according to the following strange rule: He removes two beans from the pot at random. If at least one of the beans is black, he places it on the bean-pile and drops the other bean, no matter what color, back in the pot. If both beans are white, on the other hand, he discards both of them and removes one black bean from the pile and drops it in the pot?  
At each turn of this procedure, the pot has one less bean in it. Eventually, just one bean is left in the pot. What color is it?



5. A person has to go both Northwards & Southwards in search of a job. He decides to go by the first train he encounters. There are trains for every 15 min both southwards and northwards. First train towards south is at 6:00 A.M. and that towards North is at 6:10. If the person arrives at any random time, what is the probability that he gets into a train towards North?
6. There are 2187 balls out of them 1 is heavy. Find the minimum number of times the balls have to be weighed for finding out the heavy ball.
7. There are  $n$  people and they have to figure out that who among them have blue eyes. Condition-
- They can see each other's eyes
  - They cannot talk and communicate.
8. A pond has flowers in it each day the flowers in the pond get doubled if the pond gets full on 10th day, on which day the pond will fill half?
9. A train leaves City X for City Y at 40 km/h. At the very same time, a train leaves City Y for City X at 40 km/h on the same track. The distance between city X and city Y is 80 km. At the same moment, a bird leaves the City X train station and flies towards the City Y train station at 100 km/h. When the bird reaches the train from City Y, it immediately reverses direction. It then continues to fly at the same speed towards the train from City X, when it reverses its direction again, and so forth. The bird continues to do this until the trains collide. How far would the bird have traveled in the meantime?
10. A mother has to take 5 daughters of age 6,7,8,9 and 10 to other end of the river. Mother wants to cross the boat with them but cannot take more than 2 daughters together. Also she cannot leave the consecutive aged daughter together without her scrutiny. Solve the problem.
11. Man and coach usually reach station at 5 o'clock. One day man reaches early at 3 o'clock. Man calls home and asks for coach to be sent and starts walking towards home at 3 miles/h and reaches home at 6 o'clock. Find the total distance between station and home?
12. 10 hats are there in a basket. There are 7 red, 2 blue and 1 green hat present. There are 5 people. Different combination of who can see whom and find if Xth position person can tell his hat?
13. Difference between SQL and No SQL?