Netradyne Interview Experiences

# **Slot: 2**

# **Procedure**

1. Test: No. Direct Resume shortlist
2. Interview Mode: 2 tech rounds+ 1 personality MCQ test (online-not eliminatory , not proctored)+ 1 hr round

Physical (CV Raman Building [white building near Hoysala guesthouse])

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# Sofia Sunam

**Personal View**: Easy to Moderate Interview Questions. Mostly for CV profile. Will help if already some productive/beginner projects are done in Computer Vision OR EDA or STATS.

**Status**: Attended till Round 2 of tech and did not get selected for HR.

**Interview Description**

## **Round 1:**

Educational Background of the Interviewer (only one member): idk

Project Specific Discussions: None

1. Lifetime of a bulb is given by P(T>=t). Find probability of the bulb will work for next 1 yr if given that bulb has already worked for 2 years.
2. There are 2n coins. Find probability of getting at least 2 consecutive heads or 2 consecutive tails.
3. From a square matric of size (2n+1) x(2n+1) filled with all 0s, from centre draw a circle filled with all 1s [more like black bg white circle]. Wrote code for this.
4. From a start point i, the man takes 1 step right, 2 steps left, 4 steps right, 8 steps left and so on in powers of 2 and alternate left right. After kth turn, whats the position of man?

**Round 2:**

* Different interviewer (one member)
* Whats Random forest
* Loss function of linear regression, logistic function
* Ameoba splits into 2 with probability of 1/3 and dies by probability of 2/3. Whats the probability that the ameoba will be alive? [after infinite time]
* Knn vs K means
* Whats P value
* Internship Project summary
* Visualization graphs – name any plots and why used? Lines of plots means what in box/candlestick
* Used GMM in any project?
* 2 coins biased P(T) = 0.8 and a fair coin. A coin is picked and tossed. Got 5 tails. Whats the probability that it was a biased coin ?
* Asked all questions from broad ML.. Like short interview round on MLDS topics

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# Sachin Kumawat

**Status**: Rejected

**Interview Description**

## **Round 1:**

1. Asked about my MTech project?
2. Why did you use vision transformer, have you checked the performance on CNN?
3. How does the kernel size in CNN change from starting to FFNN layer? Does kernel size increase or decrease?
4. What kernel size would you choose small or large and why?
5. Can you use 1\*1 kernel?
6. What is GAN?
7. What if you have very less data of Indian traffic image, how will you use GAN to generate image of stop sign for American traffic?
8. If we toss a coin, then what is the expected number of toss that we have to do to get first head?
9. What is the expected number of tosses we must do to get 2 consecutive heads?
10. If you have given an array, you must make another array in which it stores the product of the all the element in the given array expect the current index element?
11. What is polymorphism? What is static and dynamic polymorphism?

# Diksha Seth

**Status**: Selected

**Interview Description (1 Person in the panel)**

## **Round 1:**

Mine was mostly based on resume. I had one project based on Computer vision, they asked me to explain that. In my MTech thesis project I had used a vision transformer model from HuggingFace for some work, they asked some questions on that.

1. Introduce yourself and discuss one Vision Transformer project
2. Discussion on my MTech thesis project
3. One real life problem on object detection

**Round 2: (Two people in the panel)**

1. Introduce yourself, why did you leave the previous companies, why did you join MTech?
2. Discussion on MTech thesis project
3. Discussion on credit card fraud detection project, what problem will you encounter if you deploy this model in real time?
4. Probability question: If X and Y are Random Variables with probability density functions Px and Py, then what will be the probability density function of a Random Variable Z(=X+Y)?
5. Asked about PCA implementation from scratch and applications. Difference between PCA and Auto Encoder.
6. Probability question: You have 2 coins, 1 is biased (biased such that it only has tail on both sides) and 1 is fair. You choose 1 coin and toss it 4 times and get tail every time. What is the probability that the chosen coin was biased?
7. Explain ensemble methods. Explain bagging and boosting. One line difference between Adaboost and XGBoost.
8. Can you explain Kmeans clustering?
9. How will you choose odd numbers from a list without for loop?

**Round 3: (Psychometric Test)**

1. Non eliminatory round, they mail you an online test link which has some behavioral and situation-based mcqs. There were 85 questions which we had to answer in 25 minutes.

**Round 4: (HR)**

1. Briefly introduce yourself.
2. Why did you leave the previous companies?
3. What was your reason to join MTech?
4. How do you handle rejection?
5. When do you think your highest peak point in your life will be? (including career and personal life)
6. You will get married in some time now, how do you think you can manage both work and personal life?
7. Do you think you can give your 100% at work and then 100% at home?
8. Tell me about your family background.
9. Your manager has given you a project and you have to complete it in 15 days and you have to lead a team of 10 people and assign tasks to them, how will you do that?
10. How will you handle a difference on opinion between you and your own manager?

My opinion: Be honest about your life choices and priorities, don’t give too radical answers. Show them that you are flexible to work with and that you will be able to work in a team and that you can listen to other’s opinion and handle them well. Try to solve the scenario by giving your own example in a particular situation, they get really impressed by that.

# Sudhanshu Pandey

**Status**: Selected

**Interview Description (1 Person in the panel)**

## **Round 1:**

Mostly resume based questions, I had one project on image captioning. The whole first round was around this project only and few other questions

1. Briefly tell me about yourself
2. What is encoder and decoder in your project, explain resnet50(encoder) briefly
3. Explain GRU(decoder) briefly
4. How the model is being trained (what is input size, word embedding, loss and output of GRU) basically whole working of model.
5. Your model is made for image captioning, what If you have a video and you want its caption, how will you incorporate it into your model ( I told 2 ways, get frame by frame images and its encoded vectors , either add them without any weights or add them using some weights)
6. Ok if you use weights how will you calculate these weights { Additive attention (Bahdanau attention) }
7. Tell me if the video is reversed and then fed to your model will your model be able to differentiate between the forward and reversed video? (means would the caption be different or same for both the cases)
8. If we have a hierarchy where number of managers report to vice president and under each manager reports several engineers (Basically a tree like structure) which data structure will you use to manage it, write a python class for that.

**Round 2: (Two people in the panel)**

1. Explain your MTech research project (It was a segmentation project)
2. What loss functions did you use(I told combination of losses i.e. dice, bce, focal)
3. Why combination of dice and bce why not only one of them?
4. Explain credit card fraud detection project, how did you handle imbalance (how SMOTE works)
5. Explain bias variance tradeoff
6. Explain L1 ,L2 regularizations with expressions
7. Explain working of random forest
8. What is boosting, can boosting overfit
9. Probability question: You have 2 coins, 1 is biased (biased such that it only has tail on both sides) and 1 is fair. You choose 1 coin and toss it 5 times and get head every time. What is the probability that the chosen coin was biased?
10. Explain logistic regression, loss function of logistic regression, why log why not any other loss function (MLE)

**Round 3: (Psychometric Test)**

Same as other candidates

**Round 4: (HR)**

1. Briefly introduce yourself.

2. Tell me one incident where you did not want to do that work or task, but you did that forcefully

3. Where do you see yourself after 20 years

4. Tell me about your family background

5. Have you ever led any project, tell me about that

6. What are your aspirations in life

7. What are your expectations form us