

## CAIR - DRDO Interview Experience



July 29, 2023 SASWAT BEHERA Off Campus

**Roles:** - JRF

In total there were 2 rounds: -

- Written Round
- Interview Round

Cleared Written round and results were announced after 1 hour.

## **Question Asked in Interview Round**

- 1. Asked Introductory questions from where I belonged, where was I pursuing Masters from etc..
- 2. What were my course subjects?

- 3. What should we do when we get the data first?
- 4. What are the pre-processing steps for the data? (I answered for numerical data)
- 5. What is Linear Regression?
- 6. Can Linear Regression be used for classification?
- 7. What is tokenization?
- 8. What is SOTA?
- 9. What is unsupervised learning?
- 10. What is SVM?
- 11. What is Bubble sort?
- 12. What is real-time OS? Examples of it.
- 13. Characteristics of Mobile OS & Desktop OS? Why do we have different OS for each device?
- 14. How to train a Deep Learning Model without backpropagation?
- 15. Interviewer suggested Genetic Algorithm for the above approach, so I got a hint and started explaining how it could work. About the fitness function and then the mutation.
- 16. Asked me about which fitness function could be used here.
- 17. How to identify or separate semantically meaning words from a give string? eg. From HelloWorld, separate Hello, World, Hell.
- 18. What is overfitting? How to overcome it?
- 19. What is regularization? Why do we use it?
- 20. What is Symbolic & Non-Symbolic AI?
- 21. Question about LLMs (Large Language Models). (Didn't know about LLM so do not know remember about the question)
- 22. What is Slack Variable in SVM?
- 23. How can we infer from Deep Learning Models like Decision Trees?
- 24. There are 3 words :- cat, mat, dog. Which of them are similar?
- 25. How to check syntactic similarity? Is there any efficient algorithm?
- 26. How to check semantic similarity?
- 27. What is sub-word tokenization and why it is used?

- 28. What is the disadvantage of sub-word tokenization?
- 29. How can we have non-linear decision boundary for XOR function in simple Deep Learning Model? How can we achieve without using any non-linear functions or hidden layers?