

## ACM Research Recruitment 2020 – Report

20BBS0122

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I started working on the Research Application for ACM Research Recruitment on 29<sup>th</sup> December, 2020. And these last two days have just been mind-blowing.

After attempting the preliminary questions, I set my eyes on the Machine Learning Task. I decided to challenge myself into solving the Classification problem without using any ML libraries.

The libraries used are time, csv and random. The time library is used to track run time, the csv library is used to import the dataset, and the random library is used to shuffle the dataset. Apart from that, everything else is vanilla python.

After implementing KNN on the problem, I got an accuracy of about 88%. I learned the importance of the small optimizations that prebuilt frameworks use. After that, I implemented a Multilayer Perceptron network and achieved an average accuracy of 96%.

Then, I moved on to the Cyber Security task. This was the toughest task for me, and even after 400 lines of code, I cracked only about 40% of the given cipher. With more time, I could finish it though.

I then tried the Computer Vision task, which was surprisingly very fun. Maybe it is because I got to see the implementation of my code visually. However, I had to cut corners regarding the resolution of the image.

All in all, I thoroughly enjoyed the presented tasks, and I can't wait to hear from the Chapter.

I would just like to say that I would really like to pursue research at ACM VIT, and make a meaningful impact.