

Question: Question: "One of Honda's core ideologies is "Think not about what might happen but about what you want to do." Given this kind of corporate culture prioritizing individuals what kind of previous experience comes to your mind, could you explain in your own words? (As an example of previous experience: the situation, your capacity of involvement, your responses, and the results)" "

As a mathematics student, the main question that intrigued me is the utility of all the theoretical aspects that I am coming across. That need to know further about the real-world application has inspired me to follow a Masters's degree in Operations Research at IIT Bombay. While studying at IIT Bombay, I started to see all those core mathematical theoretical concepts that I learned at my undergraduate are coming into action, which I like and enjoy very much.

As a student at IIT Bombay, I have always thought of taking the courses that have forced me to go ahead in terms of learning, solving problems, and, more importantly, solving the question that I have in my mind.

Like, in my Masters' project, I have considered an Online Social Network with a controlled warning mechanism to deal with fake news without affecting accurate information and studied the effect of reluctant users and naive users who refuse to participate in the warning synthesis. This problem is interesting because it contained real-life applicability of different topics like applied probability, differential equations, and optimization theory. For this project, I have undertaken various courses in those directions, which enriched me to solve the problems correctly and efficiently.

Moreover, I have always loved studying different subject topics at length, so I have considered such courses in Machine Learning and Deep Learning, which focus more on student projects. Those course projects have made me learn more about the topics in-depth and understand them far better.

Question: "What would you contribute in the next 3-5 years to Honda and thereby its future customers? What do you think Honda (especially the team you are hired by) should do to help you in achieving these goals? "

After earning an undergraduate degree in math, I decided to pursue a graduate degree in IEOR. I wanted to apply the mathematics that I learned to solve real-world problems. To achieve this, at IIT B, I have taken industry-oriented courses. I could learn to develop and use concepts from mathematics and computing to real-world problems, including but not limited to applying Deep learning techniques for Computer Vision but also optimizing different CNN (Convolutional Neural Network) models to train faster through pruning.

I am very much interested in the mathematics of machine learning and interested in applying efficient Deep Learning models in Image processing and other real-world problems. As I come from a pure math background, I can quickly grasp the mathematical concepts underlying things. Therefore, apart from being an end-user of deep learning algorithms, I am also interested in the mathematical details of the problems like robustness and computational efficiency. Also, I have a keen interest in the theoretical backgrounds of different algorithms and developed my interest in statistical and mathematical methods underlying different Computer Vision and Image Processing tools.

I want to use my mathematical and statistical knowledge to learn more about machine learning, deep learning, image processing to study and use more efficient, less time-consuming algorithms for different works in solving real-world projects undertaken by the corporation.

I believe Honda, through this position, is offering a possibility for me to continue the path of using my mathematical and computing skills to solve real-world problems.