## Videet Mehta

Senior at Dulles High School Math and Science Academy, Sugar Land, TX MIT Class of 2028

## Achievements:

Regeneron ISEF 3rd Place Grand Award, Texas SEF 1st Place Grand Award,  $2 \times$  FIRST Tech Challenge World Championship Semifinalist, FIRST Dean's List Scholar, Eagle Scout,  $3 \times$  AIME Qualifier.

## Autobiography:

What do you call a dumb AI? Artificially Unintelligent.

Ok, before you scroll past my bio after hearing that terrible joke, my name is Videet. I'm from Dulles High School in Sugar Land Texas, a suburb right outside the scorching hot city of Houston. Honestly, I love two things about my high school tenure: the close-knit friend group I've maintained, and the fact that I'll be graduating in three weeks at the time of writing this. I first encountered the beauty of artificial intelligence (AI) in 7th grade while attempting to implement TensorFlow into our FIRST Tech Challenge robot. Although it was a steep learning curve, I began to enjoy the countless hours spent on fine-tuning the object detection to account for many lighting inconsistencies. As simple as it sounds, detecting a small speck of color using computer vision was mind-bogglingly difficult.

My 9th grade year provided me with an ample amount of time to learn Python. With the versatility of Python, I learned the basics of machine learning, using linear regression and Random Forest models to predict various medical diseases prior to onset. In fact, my heart disease classification model said that I would die in 300 years. I guess I will live long enough to see the Houston Texans finally win a Super Bowl.

But seeing past the hundreds of hours of writing code and thousands more debugging those annoying Panda DataFrame errors, I kept adding more and more machine learning models to my repertoire, eventually allowing me to begin AI research.

Over the last two years, I've been interested in the intersection of artificial intelligence and the medical field. I've seen firsthand the power that AI has to influence radiology, pathology, interventional medicine, and even surgery. Following the introduction of ChatGPT, I started to catch onto the large-language-model bandwagon and have been working on how to implement these LLMs into clinical applications. In fact, my science fair project was about using physician-inputted patient symptoms to provide the most applicable medical imaging protocol. I'm still scared about how fast AI development is moving. We were gifted with ChatGPT only two years ago, and now we have Devin who will most definitely shake up the software engineering industry. Nevertheless, as I finally graduate high school, I am excited to continue tackling the intersection of artificial intelligence and medicine. As my glorious king Drake once said, 'The moment I stop having fun with it, I'll be done with it.