

Joey Guo

Rising Sophomore, The Nueva School, San Mateo, CA

Autobiography:

Hi, my name is Joey Guo, and I am a rising sophomore at the Nueva School in San Mateo, California.

I first got interested in AI through a middle school capstone project. After researching active problems, I decided that I wanted to use AI to help with the diagnosis of skin cancer. To be able to tackle this larger problem, I learned some of the concepts behind computer vision, like the CNN and ViT model architectures, and machine learning as a whole, like gradient optimization. Finally, to develop my product, I learned how to use PyTorch to program the model training, validation, and evaluation procedure. The feedback from the visiting dermatologist and several potential users encouraged me to continue working in the field of AI. After that, I became even more invested in AI and expanded my work to explainability and how to bridge the trust gap in medical VLMs by fixing hallucinated claims. Thanks to my mentors from Stanford, my research and poster were presented during the 2026 Stanford Health AI Symposium, which is organized by the Stanford University School of Medicine.

Besides AI, I also enjoy mathematics and physics, competing in a variety of math olympiads. At school, I co-lead Math Club, creating the problems for our annual math competition, the Nueva Math Tournament, for Bay Area middle schoolers. I am also an active participant in my school's Physics Research Team, helping design experiments. Outside of school, I started fencing training in elementary school and moved to an Olympic-level fencing club when I was ten years old. I enjoy traveling around the country and competing in fencing tournaments.

I am incredibly honored for this opportunity to compete at the IAIO on behalf of Team USA! I'm excited to keep studying, learning, and meeting everyone there!