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Punching Man

My many years of karate have inspired me to animate a man doing a specific type of punch – the reverse punch. The reverse punch is the most common technique performed in sparring matches and is defined as punching with the hand opposite from your leading foot. For my project, I will use code from Matthew Piper’s Running Guy and Gillian Smith’s Bicycle Man to create an animation of a man with his left foot forward in a fighting stance punching with his right hand. The speed will be constant and set in the program code.

I am new to programming, but will adapt other student’s code in VPython to create my own animation. I will need to research different movements of the legs, hips, and arms including both extension and rotation to determine the proper proportions and timing so that the punch appears “realistic” (in the sense that a human would move in such a way). I will then adapt code from the Running Guy program to use a different starting position and motions.

If time permits, I will add a feature to allow the viewer to change the speed of the punch, either through a slider or field to enter a value. I can also animate the retraction of the punch, which is the phase in which the man draws his extended arm back to its starting position.