

Robotic hand

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In the dynamic landscape of robotics, the replication of human anatomy serves as an avenue of innovation that bridges the gap between nature and technology. This paper delves into the intricacies of designing a vertebral column system for a full human robot project, where the intricate mechanics of the human spine provide a blueprint for engineering exploration. By emulating the biomechanics of the vertebral column, we embark on a journey that not only seeks to capture lifelike movement but also opens new horizons for robotic adaptability and interaction. Through careful analysis and innovative engineering, we navigate the confluence of nature's design and technological progress, shaping the trajectory toward a future where human-robot coexistence achieves a new level of elegance and functionality.



Figure 1: Hexapod platform designed & produced by PI www.pi-usa.us/en/