

The End-To-End 3D Virtual Try-On Solution for The Fashion World

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Abstract

Vesto3D is a pioneer in developing cutting-edge technology for 3D virtual try-on experiences, enabling users to visualize how garments fit on a 3D avatar representing their body dimensions.

To experience our solution, users follow three simple steps. First, they measure their body with Esenca Sizing to generate their digital twin. Second, the garments are digitalized from sewing patterns, creating 3D assets that are ready to be draped onto the avatar. Finally, the 3D garments are virtually sewn together and draped onto the avatar in real-time.

During the garment digitalization process, users can customize the sewing patterns by defining how the panels are stitched together and altering the shape of the panels. Once the garments are applied to the 3D avatar, our physics engine simulates realistic interactions with forces such as gravity, friction, wind, elasticity, and others, as well as handling collisions between the garments, the avatar, and the environment. This ensures that the garments behave as they would in the real world. Users can also update garment properties (such as elasticity, bending, and mass) to simulate a variety of real and conceptual fabrics.

Vesto3D provides a dynamic environment where users can try on different garment sizes and swatches, helping them make more informed decisions when purchasing clothing. A built-in tension map highlights areas where garments may be too tight or too loose, offering detailed fit feedback. Users can further personalize their avatar by adjusting skin tone and pose, as well as visualizing it in different environmental settings.

By combining fashion, technology, and physics, Vesto3D offers an immersive and customizable virtual try-on experience, designed to enhance fit accuracy and elevate the user experience in both retail and design applications.

* <https://vesto3d.com/>