Optitex Avatar Framework Enables Modelling Agencies and Mannequin Providers to License Digital Twins of their Models for Fashion Brands and Manufacturers.

Maria LANDO Optitex, Rosh HaAyin, Israel

Abstract

For over 30 years Optitex has been creating technologies for fashion brands to design and produce apparel for any gender, age and size. Covid isolation needs, growth in eCommerce, expansion to further markets, and technological advances in cloth simulation and material rendering facilitated fashion shift to a mainly digital sampling. This highlighted the demand for realistic-looking virtual models in all sizes and shapes for try-on sessions, fit analysis, collection reviews and marketing presentations. Many modelling agencies and mannequin companies rushed to digitize and virtualize their offering. But the process left virtual model protection out of the picture. Like a snapshot shared on Instagram, 3d virtual representation of you could enter the world wide web and be used for many useful and creative or malicious purposes.

For real-life models and mannequin providers to benefit from "leasing" their services, protection of IP and monetization are critical needs that must be addressed. NFT technologies are starting to be applied to virtual 3D items, but the enforcement policies are still not clear.

At Optitex we designed a framework that essentially mirrors in a digital domain the long-existing relationships between brands and their modelling agency or mannequin providers. Modelling agencies and mannequin providers get easy avatar virtualization and encryption, as well as a simple way to define brand and vendor access rights to "lease" each such virtual avatar. Behind the scenes Optitex takes care of maintaining these access rights and assuring authorized-only use of virtual models for cloth design, simulation and fit analysis. Additionally, our technology guards virtual model distribution in any open format without specific model authorization. Pure virtual models remain to be in the property of their owners while these owners are able to lease the encrypted copies to brands and vendors directly, monetizing their IP.

Optitex's Avatar Distribution Framework creates a vast opportunity for Modelling agencies and mannequin providers to extend their business to brands and vendors to which they had no access before, and to license and price their services in new ways that fit the digital age.