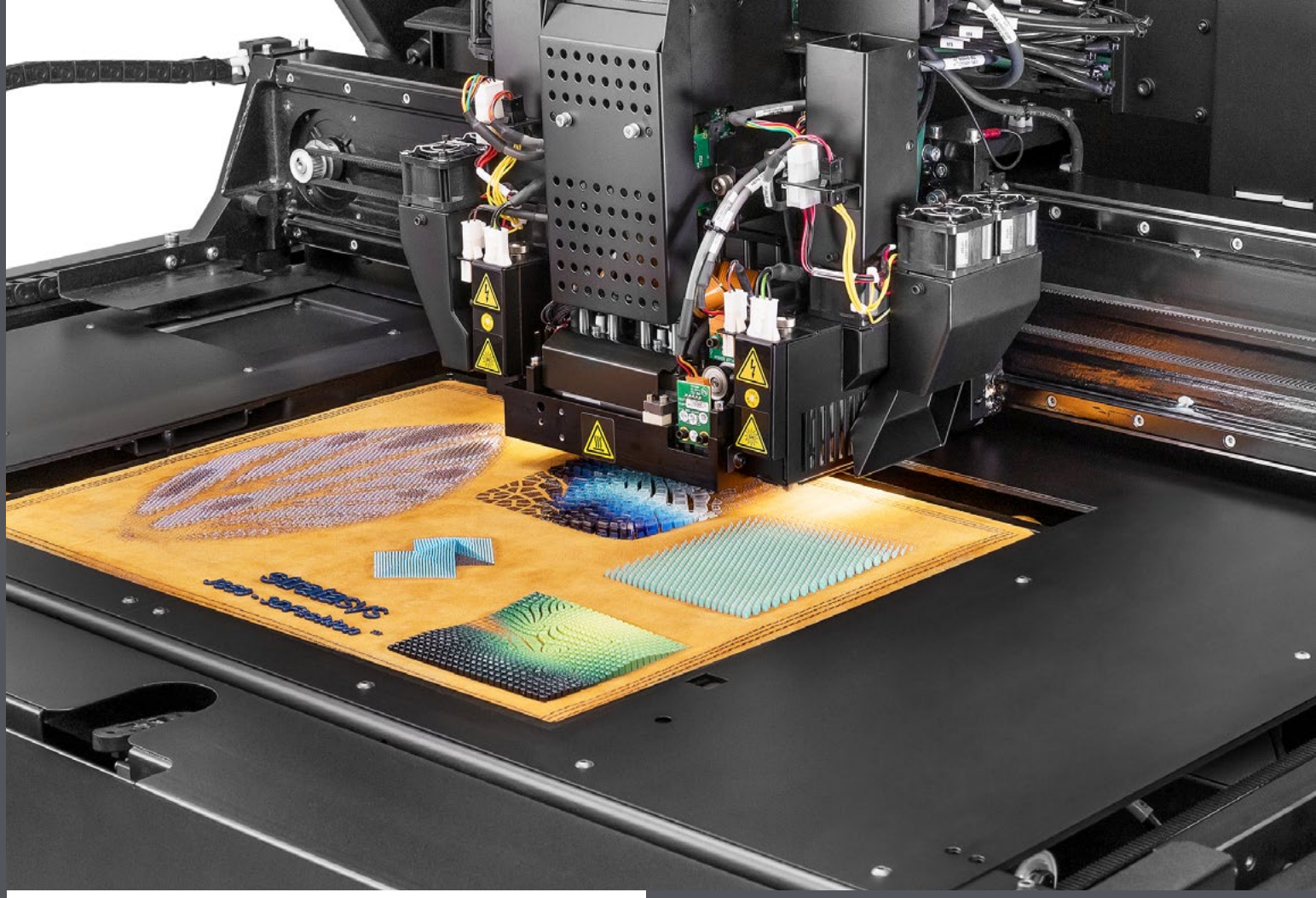

Decoding Fashion;

Decoding Fashion; Stratasys J850™ TechStyle™ 3D Printer Helps Hong Kong Polytechnic University Enable Personalized Apparel Design

stratasys

> “We wanted to use the Stratasys J850 TechStyle 3D printer to solve the issue of poor surface adhesion on different materials. Another reason was that we wanted the printed products to be directly washable.”

Representative of The Hong Kong Polytechnic University (PolyU)’s University Research Facility in 3D Printing (U3DP)

Case Study

Decoding Fashion; Stratasys J850™ TechStyle™ 3D Printer

The Hong Kong Polytechnic University 3D Printing Technology Center Laboratory (U3DP) was established in 2017 and is committed to providing a full range of 3D printer technical support for researchers, teachers and students at the school, as well as to help optimize teaching and academic research through technological transformation.

Recently, the center has been conducting a hands-on research project named “Exploration of Fashion Design, Based on Textile 3D Printing”. In order to overcome material limitations and find the most effective way to bond rigid polymers and soft fabrics and realize a tailored design of different fabric and garments, they contacted Stratasys and introduced their first 3DFashion™ printer in Asia, specially designed for the field of fashion design, the J850 ™ TechStyle™.

A representative of The Hong Kong Polytechnic University (PolyU)’s University Research Facility in 3D Printing (U3DP) said, “We wanted to use the Stratasys J850 TechStyle 3D printer to solve the issue of poor surface adhesion on different materials. Another reason was that we wanted the printed products to be directly washable.” According to the person in charge of the center, Stratasys PolyJet™ 3D printers have always been known for their ease of operation and excellent user experience, enabling teaching and research staff to master the use of this new 3D printer in a short period of time. In addition, the GrabCAD Print™ software used on this model is also very user-friendly.

Digital Bedouin 3D Embroidery - Dress, 2020
Design by Samson Shafran

The Stratasys J850 TechStyle 3D Printer is an end-to-end multifunctional printer, capable of printing on soft, flat substrates such as denim, cotton, polyester, mesh, canvas, etc., all while simultaneously ensuring that printed designs exhibit high-fidelity colors and lifelike textures. Designers across different industries have different application needs, and Stratasys 3DFashion™ technology is designed to meet all of them, while minimizing time to market and reducing prototype material waste.

As one of the top university 3D printing laboratories worldwide, U3DP is equipped with a total of 40 sets of 3D printers – including; metal powder printers, ceramic printers, aerosol jet printers and 3D bioprinters. U3DP also features other industrial printers for specific application scenarios such as large FDM printers, resin based DLP printers, SLA printers, and PolyJet™ printers, etc.

The school has used 3D printing technology to support research and teaching for more than ten years, and over that time, U3DP has accumulated a wealth of successful use cases, including 3D printed surgical simulators, anti-viral handles, management of adolescent idiopathic scoliosis, curved spine braces, etc. Today, with the introduction of the Stratasys J850 TechStyle 3D printer, combined with the research and exploration in the field of fashion design, the center is equipped to directly print different patterns and colors on fabrics of different thicknesses and materials, removing creative limitations and making clothing design three-dimensional.

The promotion and application of the Stratasys J850 TechStyle 3D printer also demonstrates another major step forward for Stratasys by entering the fashion design industry. Through the development of new materials and applications, Stratasys 3DFashion solutions will continue to reshape traditional fashion design and “tailor-make” novel breakthroughs in the fashion industry.

“Stratasys PolyJet™ 3D printers have always been known for their ease of operation and excellent user experience, enabling teaching and research staff to master the use of this new 3D printer in a short period of time.”

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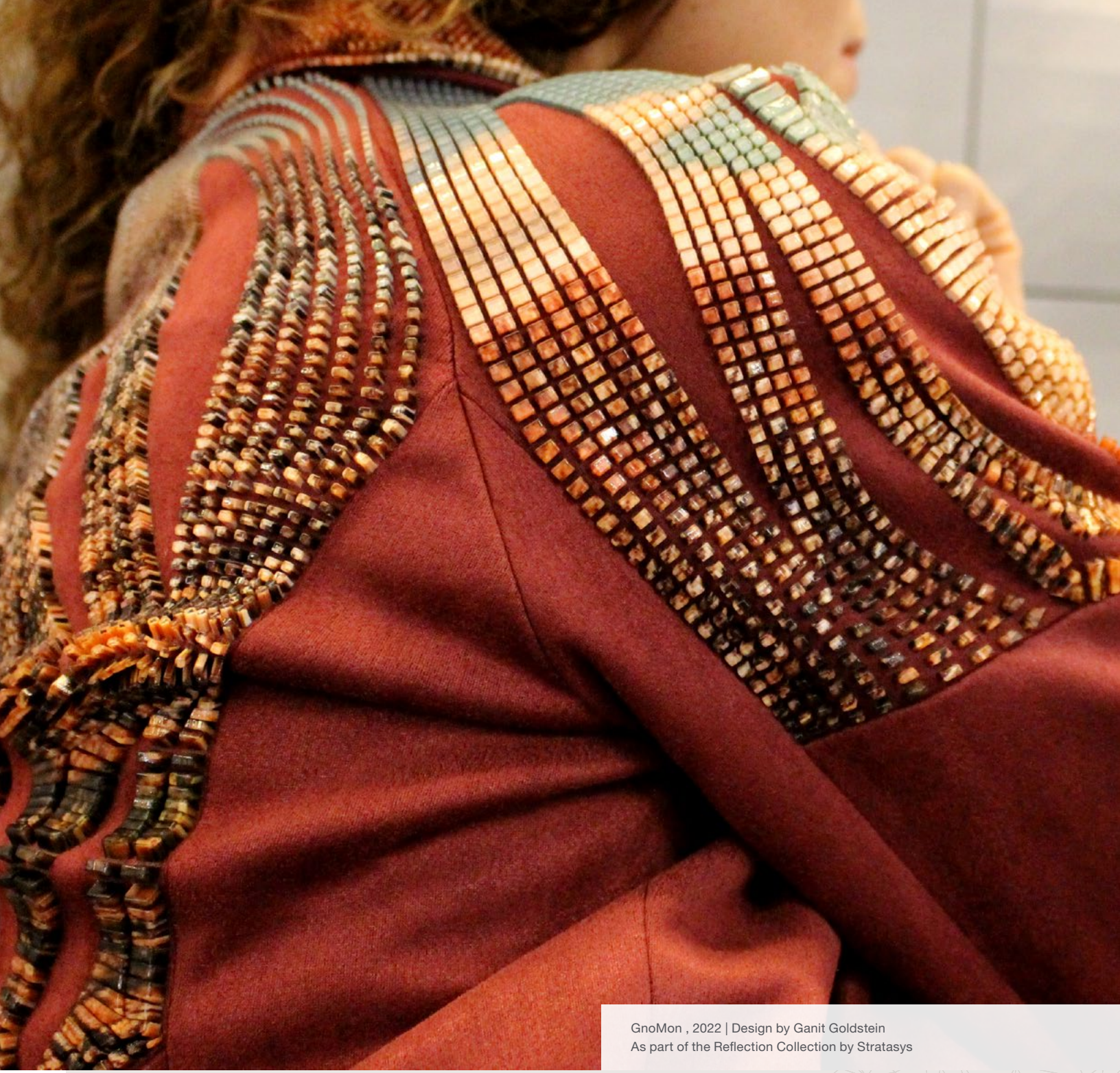

GnoMon , 2022 | Design by Ganit Goldstein
As part of the Reflection Collection by Stratasys

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Case Study