

Bachelor Thesis

Smart Textiles

Optimizing the shape memory effect of 4D-textiles using response surface methodology

Unlike conventional fabrics that are typically flat and unchanging, 4D textiles are designed to alter their shape, structure, or characteristics over time in response to external factors like heat, moisture, light, or pressure that would be applicable in the wearable device. The main goal of 4D printing on textiles in this research involves precisely managing the eventual form in terms of both the type and amount of transformation that occurs over time.

Your tasks

- Literature research for smart materials, 4D printing, and smart textiles
- 4D printing on textiles
- Conducting thermo-mechanical shape memory tests

Your skills

- Interested in the field of smart materials
- Interested in the field of additive manufacturing (AM)

Your benefits

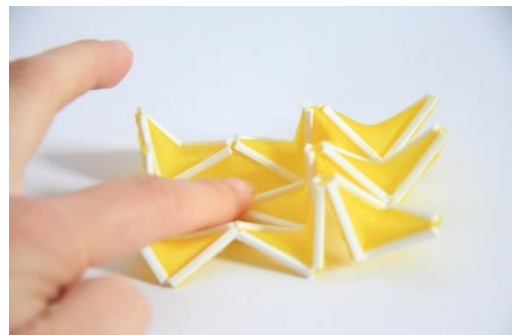
- Insights into the field of smart materials and AM
- Potential publication opportunities

Advertised

04.09.2023

Beginning

As soon as possible



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