



A modular E-textile platform for wearable technologies

A stretchable, textile-based platform which allows for the repositioning of electronic components on either side of a garment or e-textile structure.

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Applications

- Rapid prototyping of e-textile garments
- Customizable wearable technology for medical rehabilitation
- Development tool for e-textile designers and researchers
- Versatile e-textile platform for various users

Technology Overview

A stretchable, entirely textile-based multi-layer e-textile structure functions as a "fabric breadboard" for prototyping and developing e-textile garments. The system allows electronic components like sensors and actuators to be quickly repositioned on either the inside or outside surface of the fabric. This innovation reduces the time and cost associated with prototyping and allows a single garment design to be customized for a wide variety of users.

Phase of Development

TRL: 5-6

A working prototype has been developed and its functionality has been characterized in a lab setting. A garment application is ready for testing.

Desired Partnerships

This technology is now available for:

- License
- Sponsored research
- Co-development

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Researchers

- [Lucy Dunne, PhD](#) Professor, Department of Design, Housing, and Apparel
- [Heidi Woelfle](#) Lab Manager, Department of Design, Housing, and Apparel
- [Brad Holschuh, PhD](#) Associate Professor, Department of Design, Housing, and Apparel

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