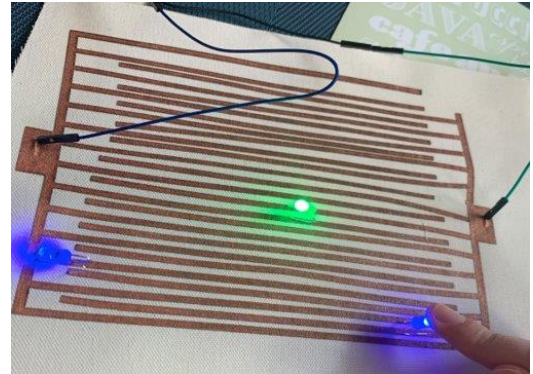


HITEX ASSIGNMENT TEXTILE GRIDS

Are you interested in smart textiles and technology? And do you like to tinker and build prototypes? Within the Hitex project, we work with 14 partners on the development of next-level technical fabrics with electronic functionalities – and you can be part of it!



TASK DESCRIPTION

An important part of our research is the integration of conductive grids into textiles. This grid is the basis for supplying power to the smart system, for activation of functionalities, and transfer of data. Next to Hitex, such grid development is very relevant for other SFT smart textile projects, such as ExPressure (pressure sensing socks for diabetics) and MASQUE (stress detection in impaired people).

Your research will focus on grid concepts and proof-of-principles. Textile aspects include design, material selection and production technologies (embroidery, weaving, knitting, screen printing). Additionally, you will study how to integrate electronic components, stability of connections, grid resistance, and how these aspects influence textile design choices. Your final deliverable: a textile breadboard system, that can be used for lighting, heating and/or sensing!

Of course you will get plenty of help from both the teams of SFT and the lectorate Ambient Intelligence, specialized in electronics for smart textiles. During weekly meetings, you will present your progress and together we tackle issues. You will work together with students from Aml and Fontys UAS in Eindhoven, when available. Finally, you get the freedom to directly interact with our industrial partners. This way the whole Hitex team can learn from your findings – and you will learn about the whole value chain.

PRACTICAL INFORMATION

Student profile:

- BSc/MSc level students with a textile background, looking for a challenging internship or graduation assignment.
- Creative, curious, self-starting with a feeling for -or interest in- electronics
- Team player who enjoys working in a complex multidisciplinary environment

Location: Epy Drost building Saxion Enschede
// SFT and Aml labs

Contact person(s): Jorrit de Jong j.dejong.02@saxion.nl
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Let us know if you are interested
We will then invite you for an interview to see if we match!