

Smart embedded fabrics study

Mentor: Robin Lin

Location: Hsinchu, TW

Duration: 1 months

Overview

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Smart fabrics are textiles that have been developed with new technologies and/or provides additional value to it. Digital components and electronics can all be embedded, and the connector between information give and receive plays a key role in the smart fabric products. In this study, we are interested in making 2D gesture readable on the smart fabric which weaved with conductive yarn.

Objectives

- Deliver ready-to-use solution with both connector and 2D gesture calculation for the smart embedded fabric.

At the end of the internship, the student will have to deliver:

- Smart embedded fabric solution database including below items:
 - Electronic yarns selection process
 - Connector optimization
 - 2D gesture calculation optimization

Knowledge/Skills

- Bachelor or graduate degree of Electronic Engineering, Chemical Engineering, Materials Science.
- Be able to communicate in English with foreign, in writing and speaking.
- Be capable of assessing new concept design, making proposal with theoretical analysis and physical concept sample.
- Familiar with material characterization and electrical property.