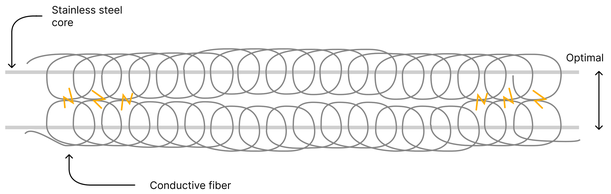
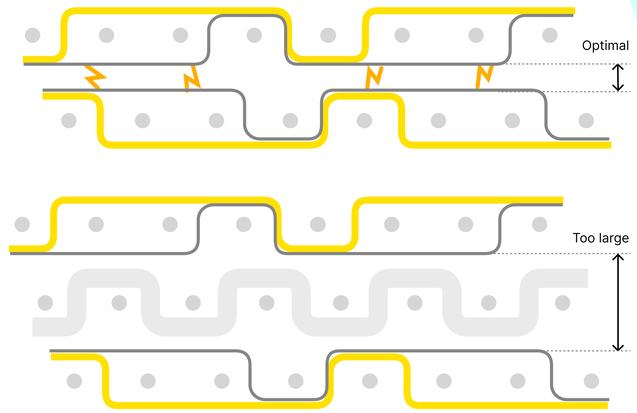


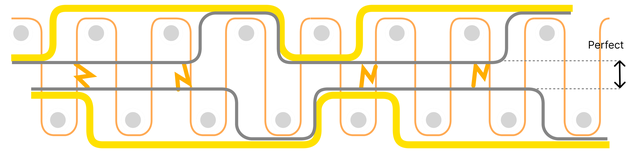
The interface effect results from the interaction between two distinct high resistance yarns, rather than from the interaction between electrode and high-resistance yarns.

Key finding 1



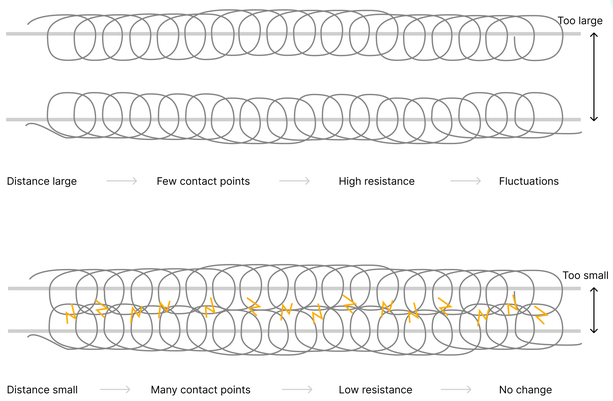
The elastic yarns used in this thesis do not improve sensor repeatability or consistency.

Key finding 3



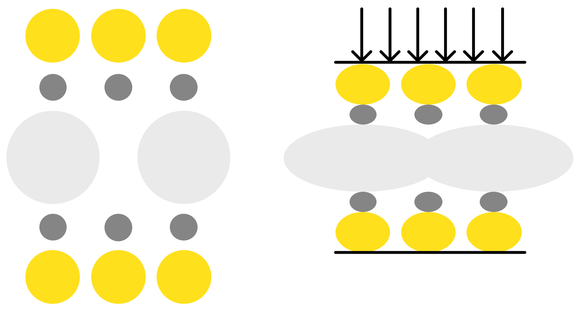
By interlacing multiple layers, the sensor maintains an optimal relative distance that results in a consistent change in resistance.

Key finding 5



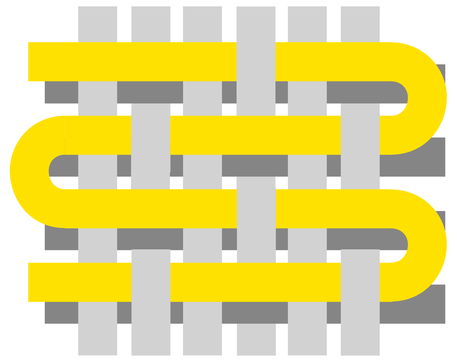
The relative distance between high resistance yarns has an optimal range.

Key finding 2



The elastic yarns act as barriers, preventing contact between the high-resistance yarns.

Key finding 4



A fully woven electrode layer on both the top and bottom ensures consistent contact between the high resistance yarns and the electrodes

Using continuous electrode threading, instead of discontinuous threading, reduces the resistance within the electrode layer.

A compound structure ensures proper contact between electrodes and high resistance yarns while preventing short circuits.

Key finding 6