

## Researchers develop color-changing fabric

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Credit: chromorphous



A team of researchers at University of Central Florida has developed a fabric that changes color.

The material uses thin metal micro-wires embedded with an <u>electric</u> <u>current</u>, which can change the wires' temperature.

Pigments within the thread respond to changes in temperature by changing color. The <u>temperature</u> shifts can be controlled through a user's smartphone.

"Although clothing has been a staple of the human experience for millennia, the basic structure and functionality of textile fibers and yarns have remained unchanged throughout history," said Ayman Abouraddy, a professor of optics and photonics at UCF, in a release. "The capabilities of electronics constantly increase and we always expect more from our iPhones so why haven't textiles been updated?"

The <u>mobile app</u> that users can access with the fabric allows subtle changes in color or larger shifts.

In an example provided by the researchers, a person could gradually add blue stripes to a tote bag by pressing a "stripe" button on the app.

The team hopes to mass produce the technology, as they develop it to work with thinner threads.

More information: <a href="https://www.chromorphous.com/">www.chromorphous.com/</a>

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