



How a tech jacket can reduce pedestrian fatalities

MUSGO represents a technological leap in this area, but also a challenge in terms of design and eco-friendly production

MUSGO is the name of the most recent illuminated jacket for outdoor sports lovers, workers or even pilgrims, that embodies a smart illumination system with optical fibers. The technology with which this solution was developed aims to reduce the number of fatalities with pedestrians, that in 75% of the cases occur in the dark. The jacket, which has a mobile app for the smartphone, has just arrived at the market and is available for purchase at the crowdfunding platform Indiegogo, during the next 30 days with a funding goal of 80.000 dollars.

According to a report from the National Highway Traffic Safety Administration (NHTSA) in the USA, in average, a pedestrian was killed every 1.5 hours in traffic crashes in 2016 and 75% of those fatalities occur in the dark. This was the main motivation for the entrepreneurs that have developed this jacket.

“The smart optical fiber illumination system that we developed increases the safety of its users through active illumination and is “smart” thanks to the use of sensors that exist in a smartphone and that help, for instance, to signal the braking of a cyclist or to inform a team of trekkers that a member was left behind”, Filipe Magalhães explains, the chief science and technology officer at VIME, the startup that together with SCOOP and LAPA are responsible for this new concept.

According to the responsible, the products already existing in the market with active illumination, that is, which not depend on external sources of illumination to reflect it afterward, do not have the “smart” component of our product achieved through the use of the sensors of the smartphone.

To ensure an enhanced safety of runners, cyclists, workers, pilgrims or even casual walkers, some of the potential users of this jacket, the company believed in a bold design, incorporating optical fibers that constitute the core of the illumination system in low light conditions. The mobile app will allow the user to select the color, the intensity and blinking frequency of the illumination, either manually, or using the sensors existent in any smartphone to trigger events in the illumination. Strategically, these features will be included in the already existing app of the partners Lapa, and will be available for Android and for iOS, benefiting from the worldwide community of already existing Lapa users.

MUSGO smart illumination allows, for instance, to automatically sign the braking/deceleration of a cyclist to the drivers around, automatically indicate to a walker/runner that a predefined geographical location has been reached or automatically warn a work that the safety perimeter has been surpassed.

The jacket includes a series of other premium features, such as a “healthy pocket” that isolates the body from the radiation emitted by the smartphone; a concealed back flap to avoid splashes and dirt while riding a bicycle in wet conditions; silicone bands in the shoulders to increase the adherence of bags straps; ventilated pockets with two-way zippers for temperature control and a breathable laser cut panel.

However, MUSGO innovation is not only in the technological jump nor in the design, but also in the eco-friendly production.



MUSGO is produced with a fabric that incorporates activated carbon particles obtained from recycled coconut shells. Products made with this enriched fabric passed with distinction tests conducted in the Sahara desert, in the Antarctic region, as well as with professional athletes and weekend warriors. The benefits of this fabric? "It does not wear (It can be washed more than 100 times without compromising its shape and structure), does not wrinkle, dries 92% faster than cotton and much faster than other technical fibers used in sportswear, eliminates odors and blocks UV radiation", Filipe Magalhães explains.

MUSGO jacket uses high-quality materials that ensure superior performance (water repellent; windproof; breathable; washable; lightweight).

Through the crowdfunding campaign, the institutions responsible for MUSGO development hope to receive eighty thousand dollars to, among other tasks, be able to proceed with the industrial production of the jackets and reach a cost relation that allows them to launch the product in the market with such an attractive price.

During the campaign, the jacket will be available for purchase for 287 dollars, being that this price is exclusive for backers, here: <https://www.indiegogo.com/projects/musgo-revolutionary-smart-illuminated-jacket> . After the campaign, and depending on the goals achieved, the jacket will be available for a price of around 600 dollars in a dedicated website, not being foreseen for now its sale in brick-and-mortar stores.

The jacket is being promoted in markets such as USA, Canada, United Kingdom, Northern and Central European countries, Netherlands, Germany, Austria, Poland, Belgium, Norway, Sweden, Finland, countries where sunlight hours are reduced and, because of that, there is a higher demand for this type of solutions.

MUSGO promotional video can be downloaded here: <https://vimeo.com/288377696>

About MUSGO: MUSGO concept is based in three pillars: Safety (Smart illumination for increased visibility), Innovation (Outstanding design and premium materials combined to integrate wearable technology and provide unrivaled performance), Eco-Friendly (Low carbon footprint as it is made out of recycled coconut shells).

About VIME: Innovation studio that comprises elements with different and complimentary backgrounds and with many years of specialized experience.

About SCOOP: World-renowned technical textile manufacturer with vast certifications and more than 25 years of experience, working for more than 22 countries. More info: www.scoop.pt

About LAPA: Portuguese Tech Company that counts already with three successful crowdfunding campaigns. Products featured in CNN, Gizmodo, GQ, Wired e Product Hunt. More info: www.findlapa.com

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