

Development of a Heated Jacket for Bike Riders Using Kansei Engineering

JR Senadheera^{1#}, EMNMR Edirisinge¹, HMOSB Herath¹, PBSM Priyankara¹, SA Sathsara¹, PKBTD Pallawala¹, JP Kodithuwakku¹ and DDGR Karunarathne¹

¹General Sir John Kotelawala Defence University, Sri Lanka

#37-cs-5972@kdu.ac.lk

We are highly uncomfortable in hot and cold temperatures because our bodies produce heat through metabolic processes, especially when working hard. We dress more comfortably in jackets and pants during colder months. Hence, we created a novel evaporative-type motorcycle seat, a jacket, and a pair of pants designed and made using several heating coils. The body temperature is measured using numerous feedback thermal sensors dispersed over a large area of the seat, jacket, and pants. The measurements are then sent to the control unit, where they are used to raise the temperature of the heating coils in response to the body's need to warm up.

Keywords: heated jacket, Kansei engineering, bike riders