

PASSENGER INDIVIDUAL POSTURE IN LEVEL 5 AUTOMATED DRIVING

This study is done to explore the postures assumed by passengers in the absence of driving-related activities (DRAs). The freedom of conducting various Non-driving-related activities (NDRAs) in future Level 5 AV will allow passengers to be in a more NBP. This study introduces a neutral body posture in various NDRAs in one-g gravitation settings avoiding the restrictions of seats itself. Participants were asked to construct a Build-Your-Own seat out of foam blocks to be able to conduct NDRAs in a comfortable position. Joint angles and seat setting of the Build-Your-Own seat in one-g gravitation settings are present and compared to the use of the current car seat and zero-g NBP(neutral body posture).

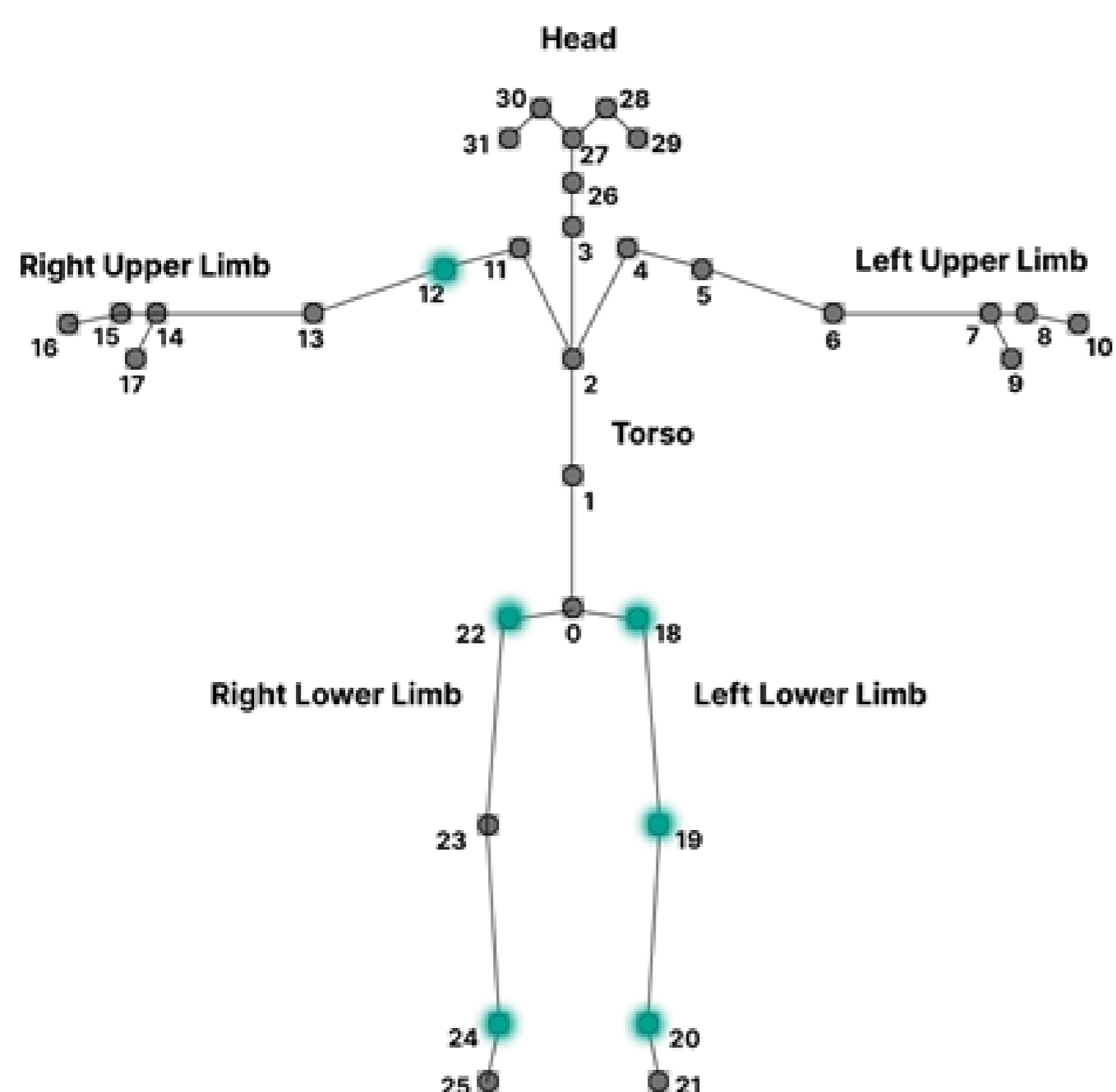


Illustration of joint skeleton with significant differences between Build your own seat and an existing car seat

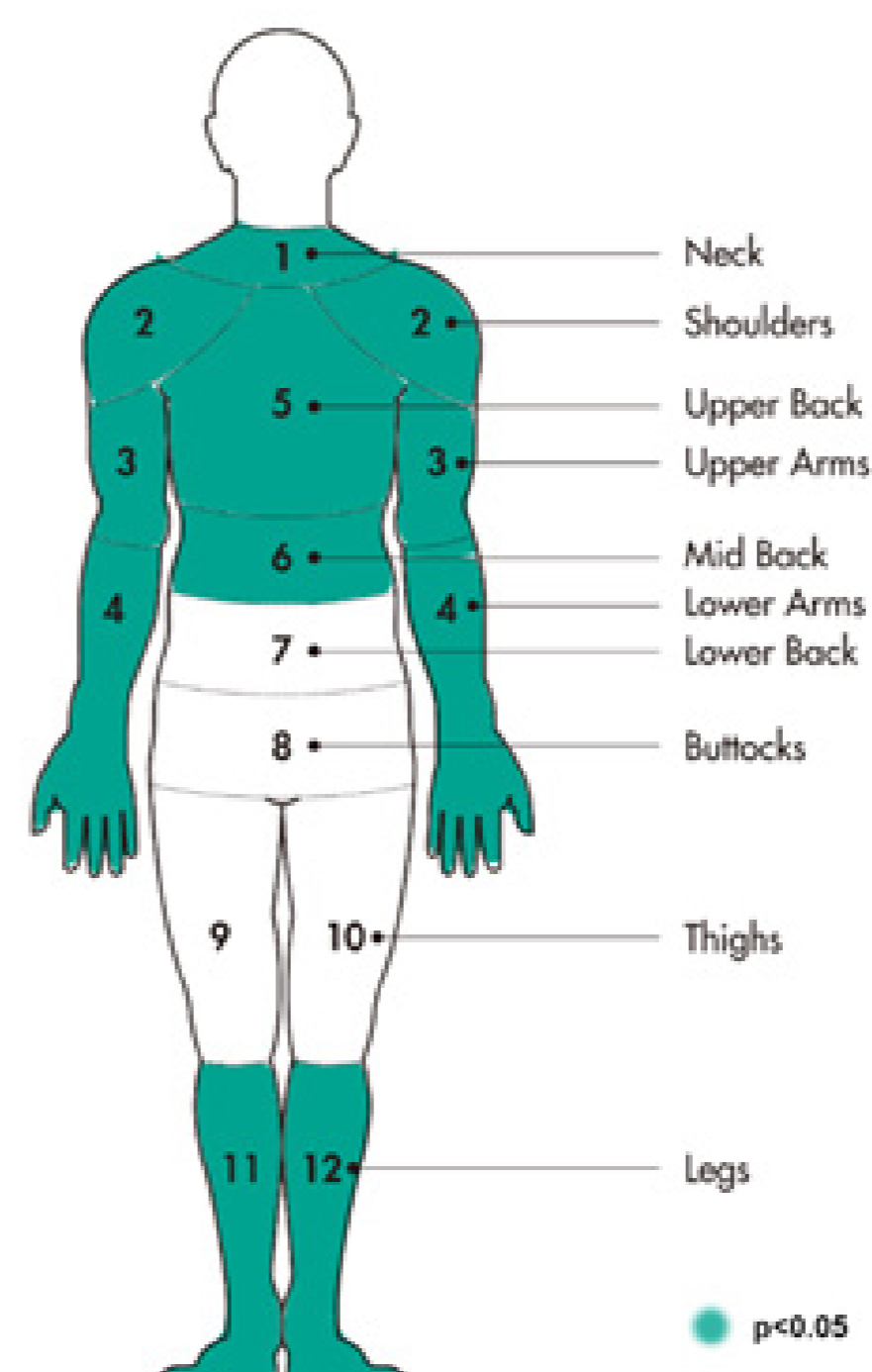


Illustration of local posture discomfort with significant differences between Build your own seat and an existing car seat

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Passenger Individual Posture
in Level 5 Automated Driving
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Integrated Product Design

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