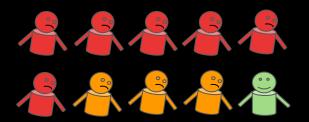
[BodyPose] ACEAI 2019/20



Marc - suffers from back pain due to bad body posture habits at his workplace.

Motivation





60% - 90% of people will suffer from low back disorders at some point in their life (1)

Motivation

56 %

of all **employees** in EU **use computers** & internet at their workplace (1)

30 %

of European workers suffer from back pain (2)



1.

back pain tops the list of all reported work-related disorders (2)

- (1) Eurostat (2018)
- (2) European Agency for Safety and Health at Work

Our Mission What specifications should a solution fulfill?













BodyPose - is a Webapp

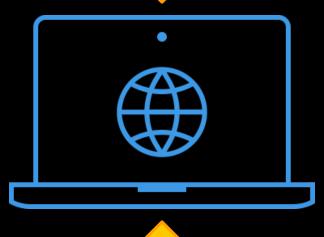
that **improves body posture** habits

at workplace

Main Components

Rule-based system for evaluating body posture





Adjustable Feedback system

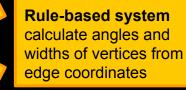
Statistics

containing evaluation of body posture over time

How does it work?

Calibration

edge coordinates of detected pose



Feedback system based on thresholds

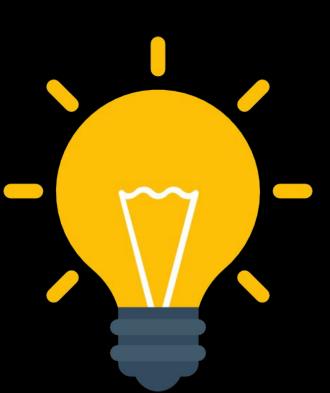
PoseNet Output

edge coordinates of detected pose

Statistics

Lessons learned

"Slim" Deep
Learning
models still
have high
power
consumption



How to embed a pretrained model

How to adjust a pretrained model for better performance

Technologies







