

Human behavior understanding from motion and bodily cues using deep neural networks

Citation for published version (APA):

Dotti, D. (2021). *Human behavior understanding from motion and bodily cues using deep neural networks*. [Doctoral Thesis, Maastricht University]. Maastricht University. <https://doi.org/10.26481/dis.20210615dd>

Document status and date:

Published: 01/01/2021

DOI:

[10.26481/dis.20210615dd](https://doi.org/10.26481/dis.20210615dd)

Document Version:

Publisher's PDF, also known as Version of record

Please check the document version of this publication:

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Propositions

accompanying the dissertation

HUMAN BEHAVIOR UNDERSTANDING FROM MOTION AND BODILY CUES USING DEEP NEURAL NETWORKS

by

Dario DOTTI

1. AI models are starting to “see” human behaviors by processing the rich information conveyed by human body language and body motion.
2. Machine vision enhances and supports human cognitive limitations such as memory, attention, and perception (chapter 3 and chapter 4).
3. Multidisciplinary projects offer great opportunities to explore problems from different perspectives and to test AI models in real-world scenarios (chapter 3).
4. Neural networks are not magical tools, if the input data is noisy, the output will be noisy too (chapter 5).
5. Behavior understanding is not purely a mathematical/computational problem, it should be tackled from different scientific points of view (chapter 6).
6. The understanding of human bodily expression will humanize technology.
7. Alternating between the small picture (details) and the big picture (objectives) is the key for efficient research.
8. The introduction section should be written as last.
9. Become immune to ... rejections.

These propositions are regarded as opposable and defensible, and have been approved as such by the promotor Dr. Stylianos Asteriadis.