

University of Groningen

Feature selection and intelligent livestock management

Alsahaf, Ahmad

DOI:
[10.33612/diss.145238079](https://doi.org/10.33612/diss.145238079)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2020

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):
Alsahaf, A. (2020). *Feature selection and intelligent livestock management*. [Thesis fully internal (DIV), University of Groningen]. <https://doi.org/10.33612/diss.145238079>

Copyright

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

Take-down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Propositions

associated with the thesis

Feature Selection And Intelligent Livestock Management

by

Ahmad Alsahaf

1. Using machine learning for phenotype prediction in livestock can unlock the potential of phenotypic and environmental records that are not typically used in breeding value estimation.
2. Computer vision technology could help minimize unnecessary human-animal interaction at livestock farms, and improve livestock farming logistics.
3. The scientific literature of technological innovations related to livestock often makes mention of the role of livestock in solving the world's food security problems, and how technological innovations, such as machine learning, can facilitate that role. While this is true in certain contexts, what is also deserving of attention is livestock's detrimental role on the environment, such as its green house emissions, and its heavy use of land, water, and energy resources. Technological innovations, like machine learning, should be channeled towards making livestock production more sustainable, rather than increasing its size uncritically.
4. Due to the ubiquity of machine learning in people's lives - including their most intimate, personal, and consequential aspects - it is the social responsibility of machine learning researchers and practitioners to find new ways to demystify its methods, and to make the decisions made by those methods more transparent. Feature selection, and other modes of interpreting models, deserve as much attention as the other benchmarks that are sought in the field.
5. "Down with the privileges of education, as well as with those of birth."

- Peter Kropotkin