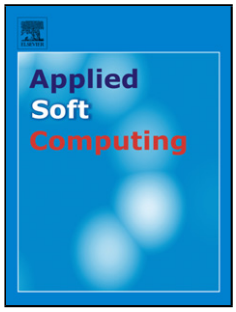

Title: Predicting body fat percentage from anthropometric and laboratory measurements using artificial neural networks

Author: Tamás Ferenci Levente Kovács

PII: S1568-4946(17)30341-1
DOI: http://dx.doi.org/doi:10.1016/j.asoc.2017.05.063
Reference: ASOC 4267

To appear in: *Applied Soft Computing*

Received date: 25-1-2017
Revised date: 15-4-2017
Accepted date: 31-5-2017

Please cite this article as: Tamás Ferenci, Levente Kovács, Predicting body fat percentage from anthropometric and laboratory measurements using artificial neural networks, *<![CDATA[Applied Soft Computing Journal]]>* (2017), http://dx.doi.org/10.1016/j.asoc.2017.05.063

Highlights

- Body fat percentage is predicted from easily measurable data to quantify obesity risk.
- Linear regression, neural networks and support vector machines are used.
- Models built on empirical data from a representative US health survey (n=862).
- Optimal parameters are chosen and bootstrap validation is used.
- Linear regression is slightly outperformed by support vector machines, but not neural networks.