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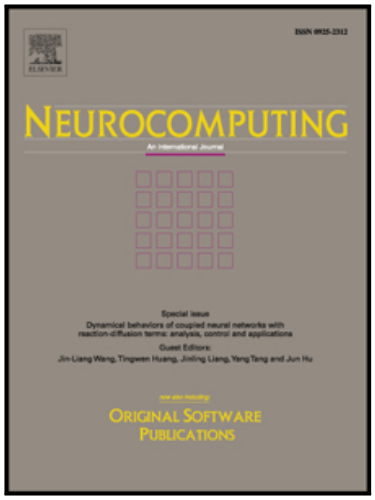

A novel index for the robustness comparison of classifiers in fault diagnosis

J.M. Bernal-de Lázaro, O. Llanes-Santiago, A. Prieto-Moreno, A. del Castillo-Serpa, A.J. Silva-Neto

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Highlights

- A novel index for the robustness comparison of classifiers in fault diagnosis is proposed.
- The accuracy, reliability, and insensibility to noise of the classifiers are combined in a robustness index.
- A comparison with the measures Relative Loss of Accuracy (RLA) and the Equalized Loss of Accuracy (ELA) is performed.
- Regard to a local robustness analysis, the index provides a high capacity of decision based on a solely numerical value.