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A fuzzy transition based approach for fault severity prediction in helical gearboxes

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Highlights

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- A monitoring system based on fuzzy transitions for fault severity prediction is presented.
- Features extracted from vibration signals of rotating devices are used as input information.
- A static fuzzy model is used for computing the weights of fuzzy transitions (WFT).
- WFT depends on the knowledge of temporal behavior of samples associated to a fault degradation pattern.
- A dynamic equation using WFT allows predicting the next degradation state of the rotating device.

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