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Generalized Reliability Importance Measure Using Gaussian Mixture

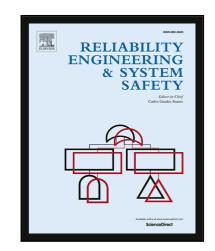
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Highlights

- The concept of FORM importance measures are generalized to handle challenging problems
- GRIM overcome challenges in problems with multiple critical subdomains or large curvature.
- Using regional participation factors, the relative importance is evaluated per each critical region.
- GRIMs are computed using a Gaussian mixture model fitted to the density in the failure domain.
- Various numerical examples successfully demonstrate merits and applicability of GRIMs.

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