A Hybrid Method to Deal with Aleatory and Epistemic Uncertainty in Risk Assessment

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Abstract

Risk assessment is an important and significant aid in the decision making process. Risk assessment is performed using 'model' and a model is a function of parameters which are usually affected by uncertainty. Some model parameters are affected by aleatory uncertainty and some others are affected by epistemic uncertainty. In this paper we propose a hybrid method to deal with propagation of both kinds of uncertainty within the same computation of risk.

References

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A Hybrid Method to Deal with Aleatory and Epistemic Uncertainty in Risk Assessment


Index Terms

Computer Science

Fuzzy Systems
Keywords
Uncertainty  Risk Assessment  Monte Carlo Simulation  Probability Theory  Possibility Theory