
Shapley and aggregated Shapley effects for sensitivity analysis with correlated inputs. Application to long-term avalanche hazard assessment.

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Abstract

During this talk, we will give a review on Shapley effects for sensitivity analysis with correlated inputs. Then, we will introduce aggregated Shapley effects for dealing with vectorial or functional outputs. We will also present an extension of non parametric estimation procedures to estimate these aggregated indices. The usefulness of aggregated Shapley effects is demonstrated on an application to ong-term avalanche hazard assessment.

Keywords: sensitivity analysis, non parametric inference, risk assessment

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