

MODEL FOR SOCIALLY SIGNIFICANT BEHAVIOR RATE ESTIMATE: CONSISTENCY DIAGNOSTICS

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We considered a problem of consistency diagnostics for socially significant behavior model based on the data about behavior episodes. We described the extension of the model and provided the examples of consistency estimates. We suggested possible improvements for this model.

Keywords: diagnostics, consistency evaluation, socially significant behavior, last episodes, Bayesian belief networks.

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References

- [1] Aghaarabi E., Aminravan F., Sadiq R., Hoorfar M., Rodriguez M.J., Najjaran H. Comparative study of fuzzy evidential reasoning and fuzzy rule-based approaches: an illustration for water quality assessment in distribution networks. *Stochastic Environmental Research and Risk Assessment*, 2014, vol. 28, no. 3, pp. 655–679.
- [2] Qi H.S., Alzaabi R.N., Wood A.S., Jani M. A fuzzy criticality assessment system of process equipment for optimised maintenance management. *International Journal of Computer Integrated Manufacturing*, 2015, vol. 28, no. 1, pp. 112–125.