Supplementary material for
ARMS: Automated rules management system for fraud detection
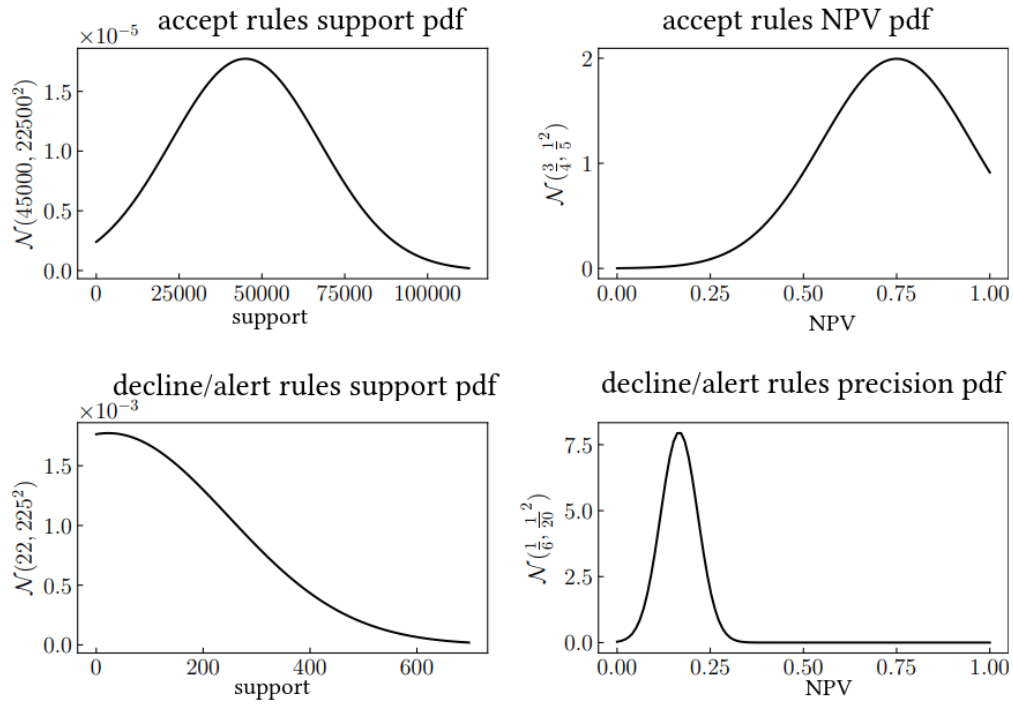
Supplementary Figures

Figure S1: Rules support and "correctness" (NPV for accept rules, precision for alert/decline rules) probability density functions (pdf) by action.
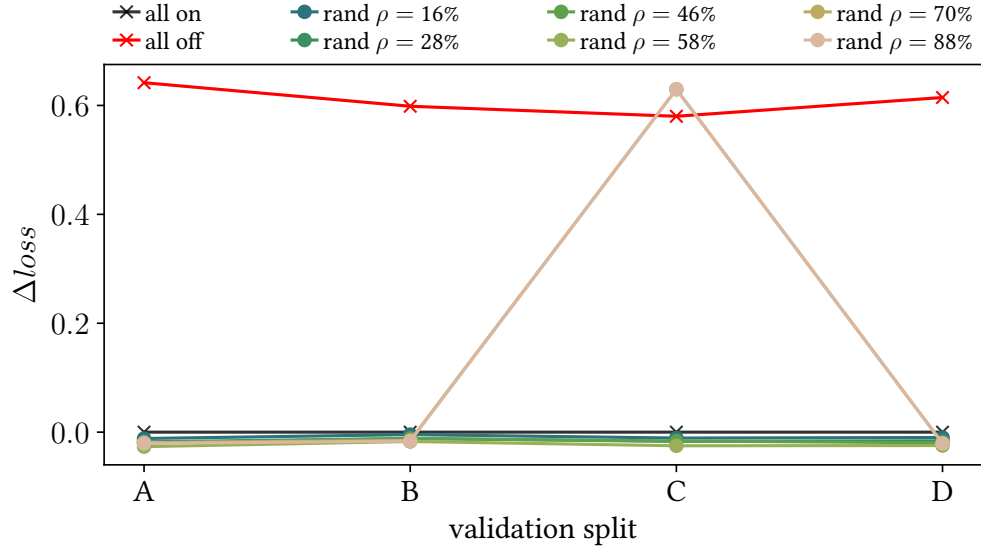
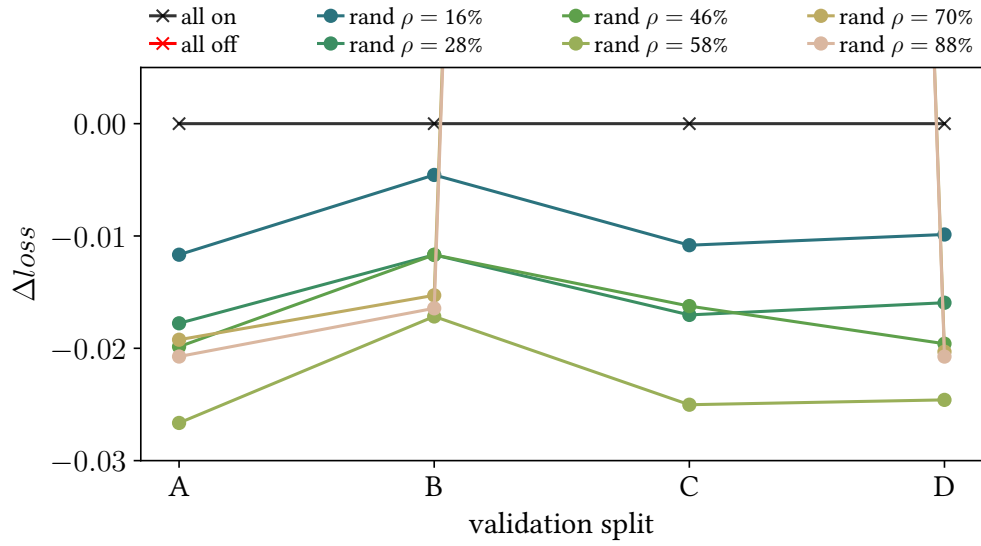Figure S2: Baseline loss comparison in Dataset D2.

Figure S3: Baseline loss comparison in Dataset D2 (zoomed in).
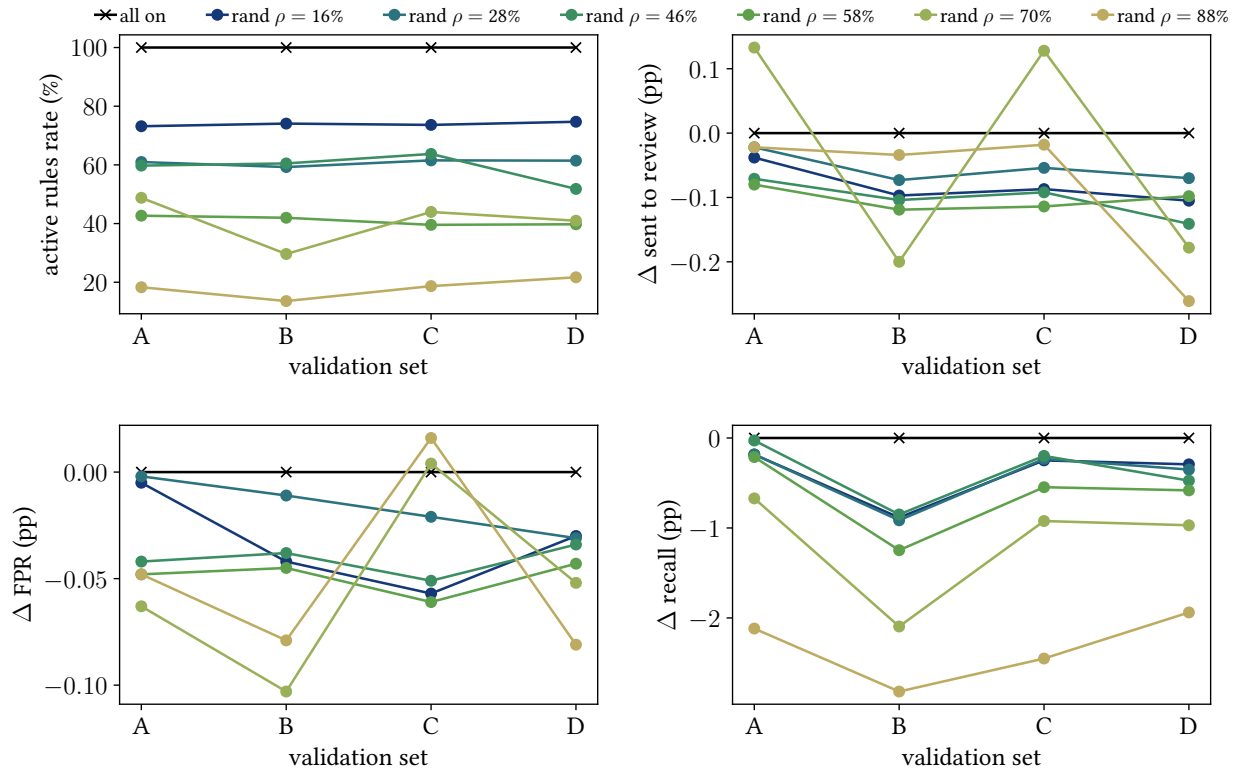
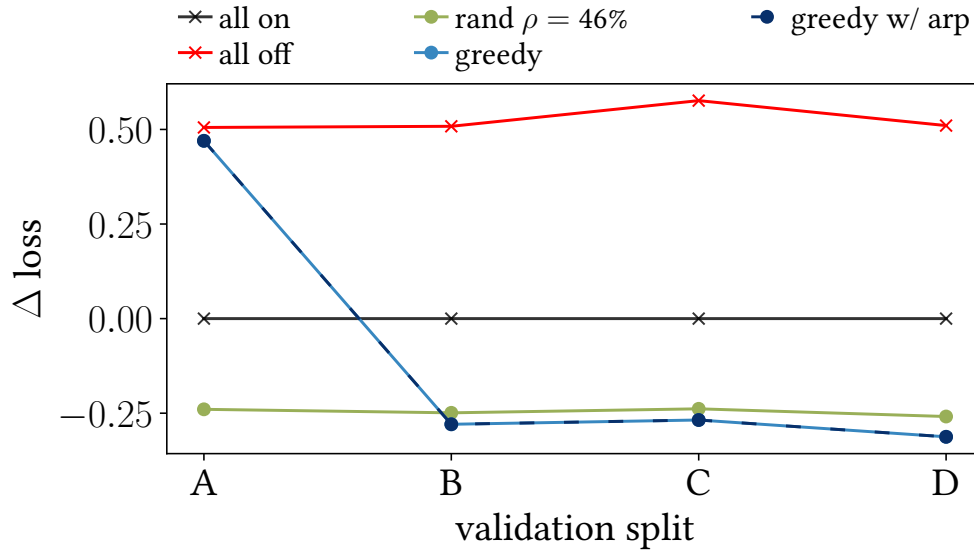Figure S4: Baseline metrics comparison in Dataset D2.

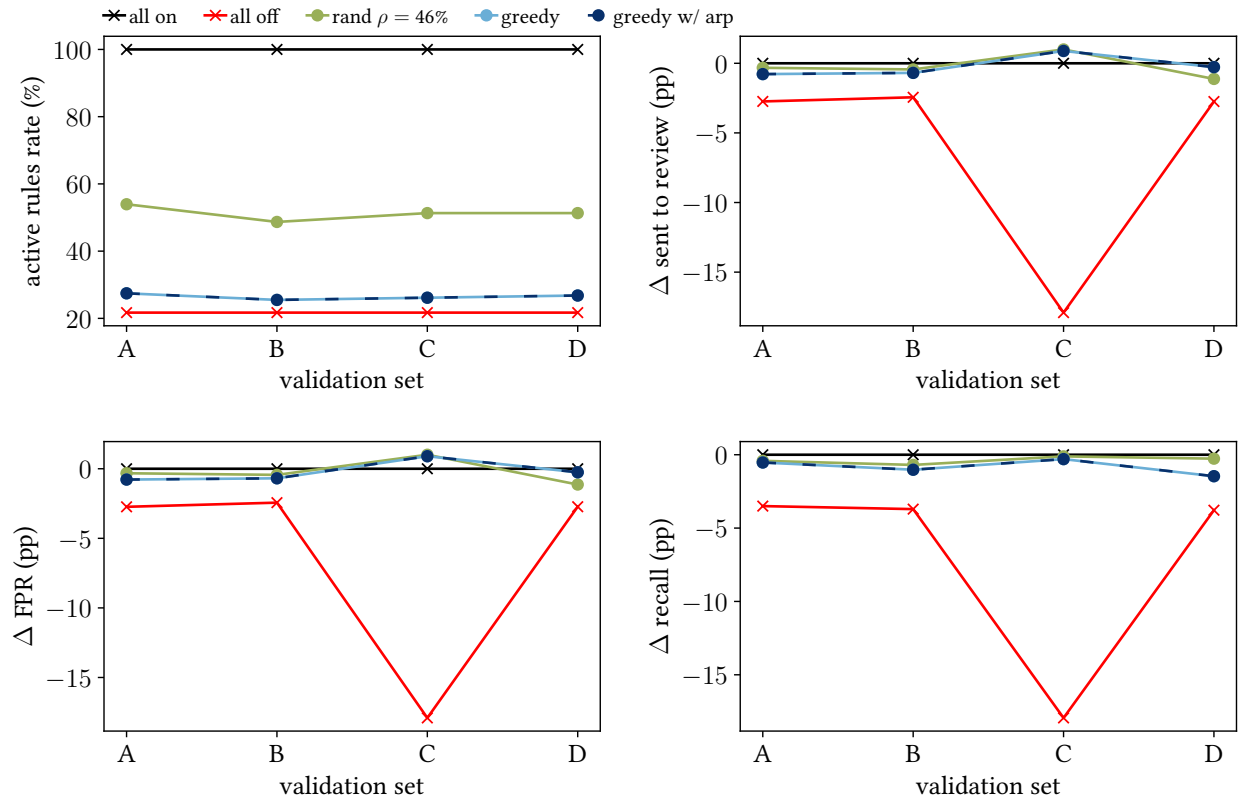Figure S5: Greedy expansion loss in Dataset D1.
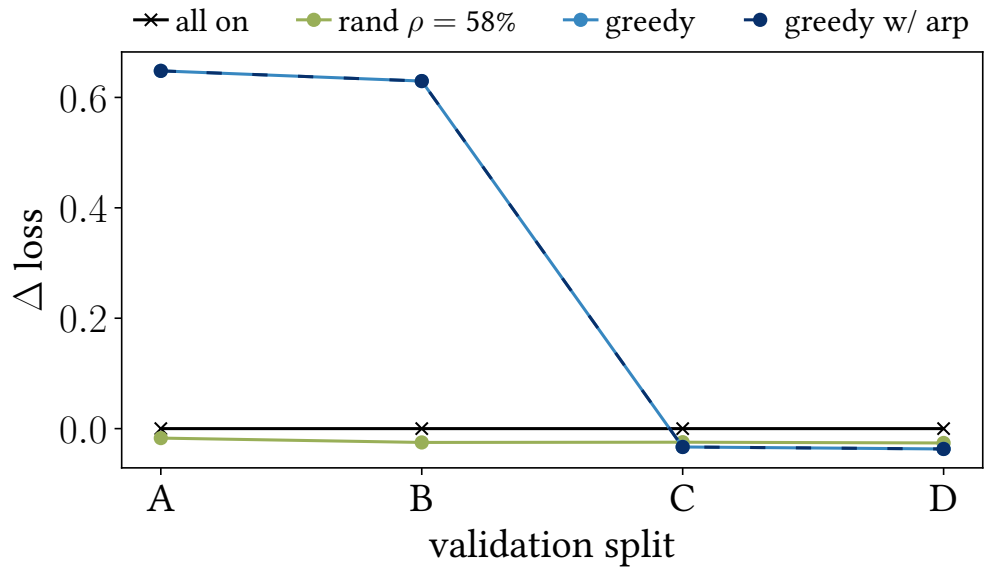
Figure S6: Greedy expansion metrics in Dataset D1.

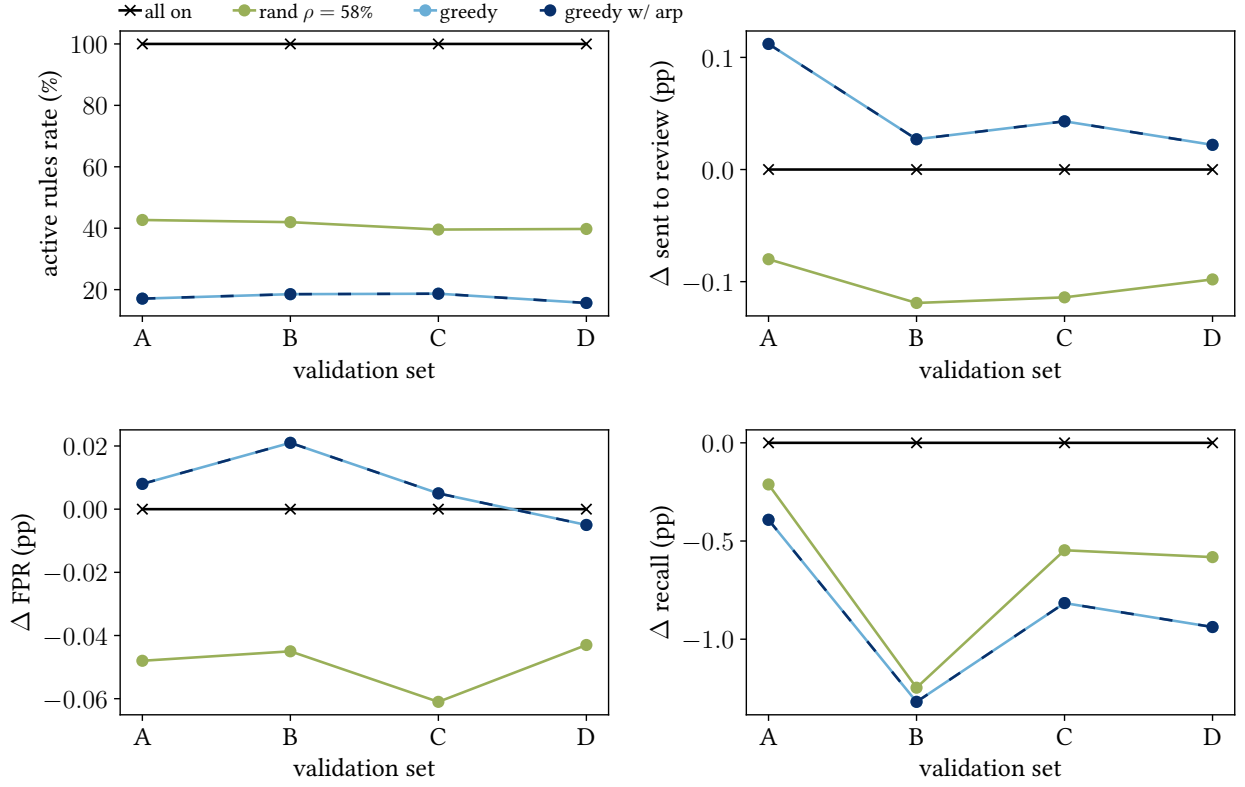Figure S7: Greedy expansion results in Dataset D2.
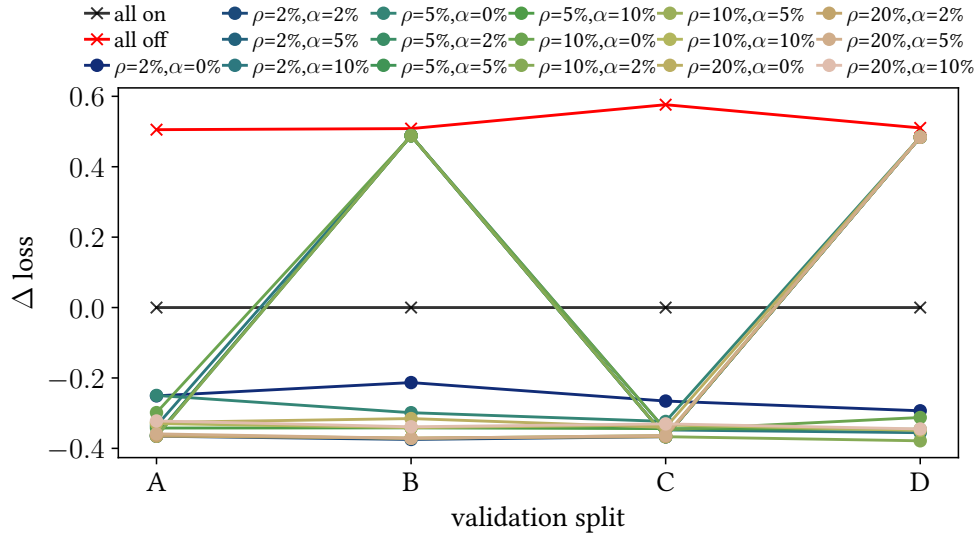
Figure S8: Greedy expansion results in Dataset D2.

Figure S9: Influence of mutation probability ρ and survivors fraction α on Dataset D1.
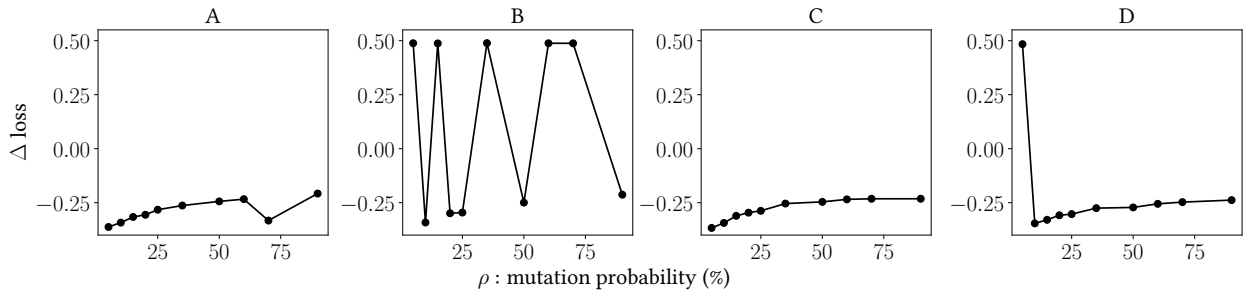

Figure S10: Influence of mutation probability ρ on Dataset D1 across all folds.
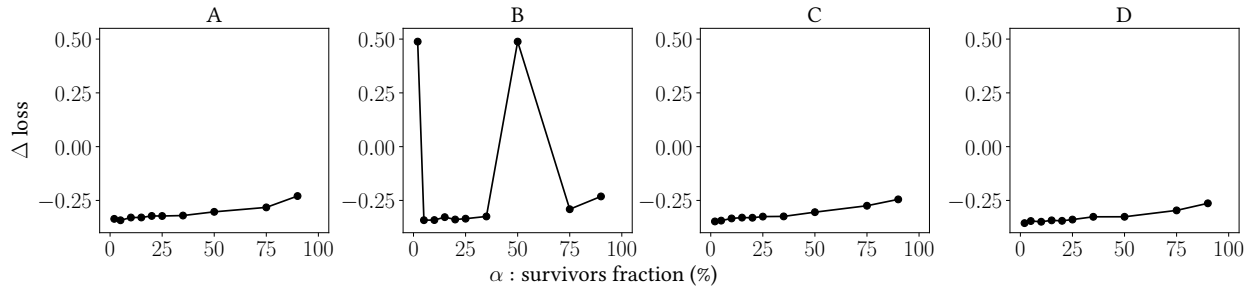
Figure S11: Influence of survivors fraction α on Dataset D1 across all folds.
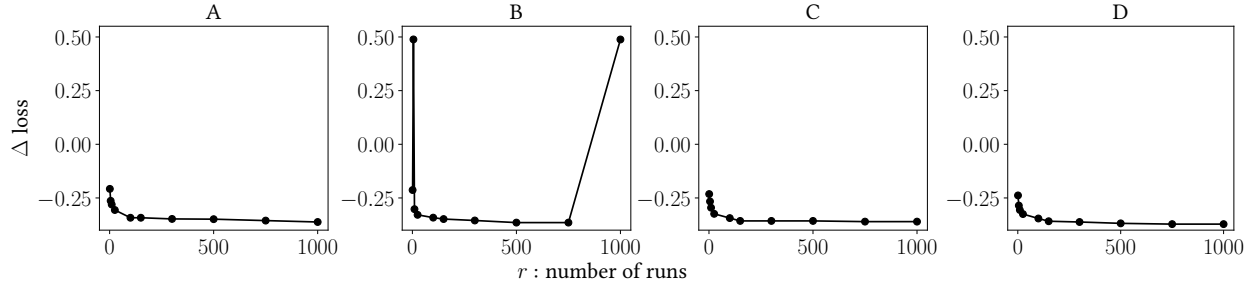

Figure S12: Influence of the number of runs r on Dataset D1 across all folds.
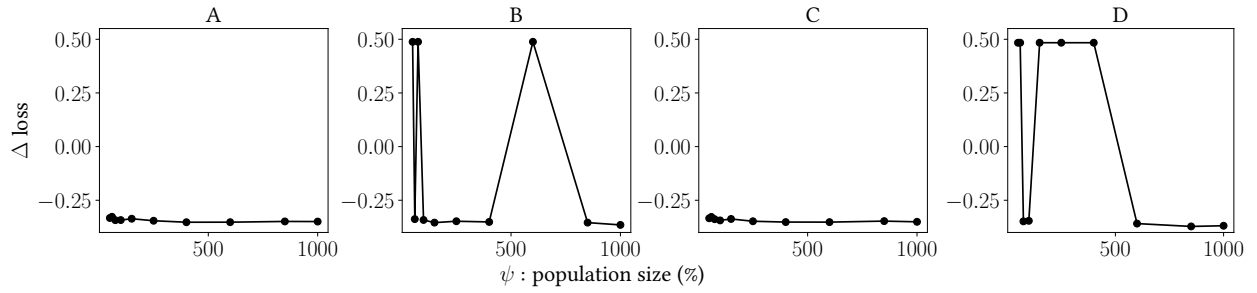

Figure S13: Influence of the population size ψ on Dataset D1 across all folds.

Figure S14: Influence of mutation probability ρ on Dataset D2 across all folds.

Figure S15: Influence of survivors fraction α on Dataset D2 across all folds.

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Figure S16: Influence of the number of runs r on Dataset D2 across all folds.

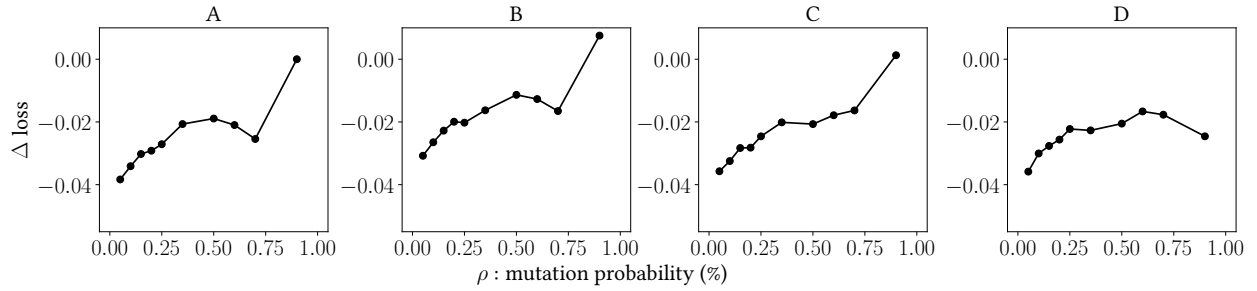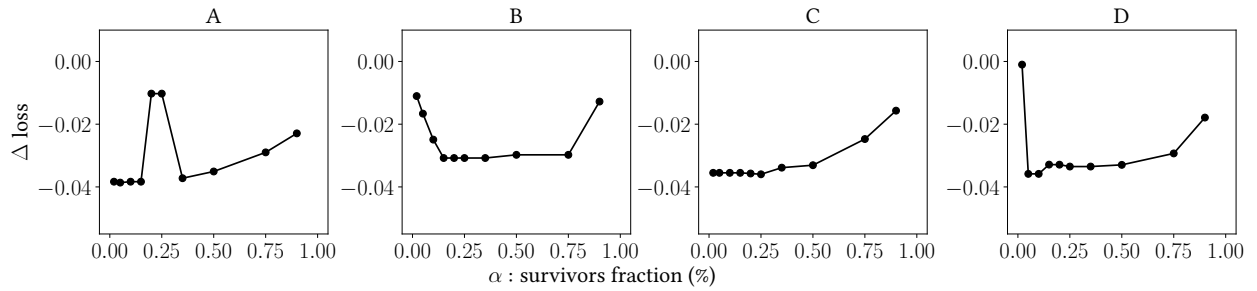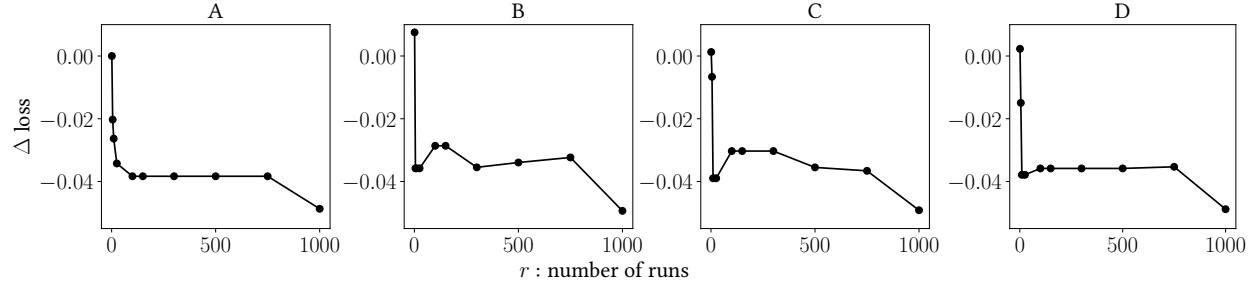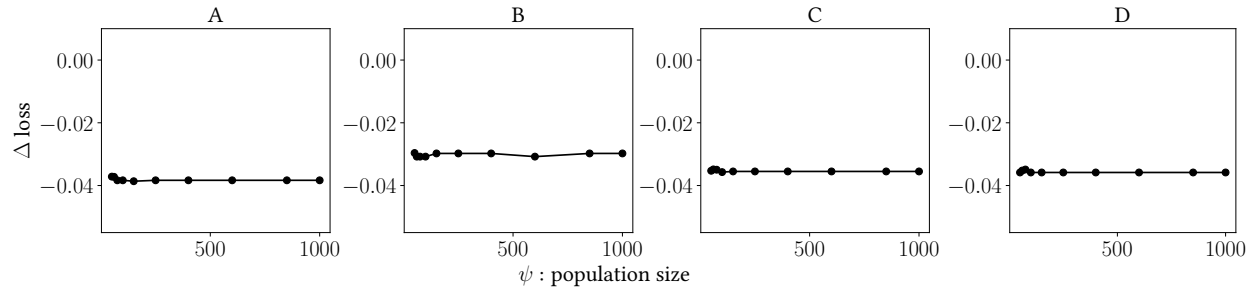Figure S17: Influence of the population size ψ on Dataset D2 across all folds.