Rules and Counter factual rules extracted with LORE

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Some factual and counterfactual rules extracted from a Random Forest classifier, using LORE. This result is part of the work done for the paper Predicting and Explaining Privacy Risk Exposure in Mobility Data.

Examples of users classified as **high risk**:

rule $=$ work entropy ≤ 7.09, radius of gyration ≤ 4.98, sld avg $> -3.31 \implies$ high risk

counter factual $=$ radius of gyration > 4.98

rule $=$ n.user home ≤ 175.50, home entropy $\leq 6.56 \implies$ high risk

counter factual $=$ n. user home > 175.50

An example of a user classified as **low risk**:

rule $=$ home entropy > 10.08, radius of gyration ≤ 1.43, n. user home $> 1054.50 \implies$ low risk

counter factual $=$ home entropy ≤ 10.08, radius of gyration > 1.43