Robot Screener

Robot Screener is *type* of Dual Screening where an automated substitute for one of the human reviewers traditionally involved in dual screening.

Enabling Robot Screener

Robot Screener may be enabled from Screening Settings, under "Inclusion Modeling". Before Robot Screener can be enabled, the nest must:

- Be configured for dual screening
- And contain 50 adjudicated records (i.e. having a final screening decision)
- And contain 5 included records

The latter two requirements help ensure a minimum model accuracy; however, the model will usually be suboptimal with this volume of training data, and typically improves as more records are screened.

By enabling Robot Screener, automatic updating to the inclusion model is made non-optional, as is the hiding of inclusion probabilities. This avoids biasing human reviewers with data already being used by Robot Screener.

In Action

Which Records

Robot Screener automatically adds a reviewer-level screening decision to records with:

- Fewer than 2 reviewer-level screening decisions
- No adjudicated screening decision

Records it excludes will assigned the exclusion reason Robot Excluded in all cases.

When

Robot Screener adds/updates its screening decisions when:

- · Robot Screener is enabled
- · A new inclusion model is trained
- New records are imported into your nest
- 10 addditional records have been adjudicated, since the model was last trained

As pointed out above, Robot Screener will not modify its decision on a record after that record has been adjudicated. Prior to adjudication, its decision on a record may be modified, reflecting more information available to it & improvement in its accuracy.

Usage Guidance

Robot Screener, by accuracy, is not a replacement for a human reviewer. It should typically be used for reviews where budget, team size, or time available are restricted. Some additional usage tips:

- While Robot Screener may be enabled at 50 adjudicated / 5 included records, we typically advise not enabling it until a cross validation AUC of 0.7 or greater is achieved.
- Avoid use of the "Auto-adjudicate" button, especially early on. The model (and human reviewer) should be subject to scrutiny. This will improve the quality of your review, reduce later reworks, and produce better training data for Robot Screener.

From:

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Last update: 2023/04/10 17:09