

XAI Bayesian Teaching Scientific Reports supplemental analyses

Load packages

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## tidyverse
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## lme4
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## feather
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## viridis
## tidyverse
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## tidyverse
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Load the data

I'll only analyse the data without the 32 trials with negative RT

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Data preparation

Code if participant picked the correct response as a binary variable and whether the participant response matches the ground truth of the image

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Verify that ground truth response is correctly encoded by cross-referencing it with the prediction type variable

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Create group-level standardisation for the logarithm of response time

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Prepare bins for learner ratings and resnet ratings for figures

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Turn the teaching condition into a factor

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SDT classifications

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Do explanations by example help humans predict AI classification?

Setting text size

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Formal models for intervention effectiveness

Function for transforming logodds to probability

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Prepare the data by focusing on the conditions with full examples vs no examples

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The performance of the Bayesian Teaching model

Is the Bayesian teacher well-calibrated?

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How is the resolution of the Bayesian teacher?

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Bayesian Teaching figure

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