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Personal comfort models: Predicting individuals' thermal preference using occupant heating and cooling behavior and machine learning

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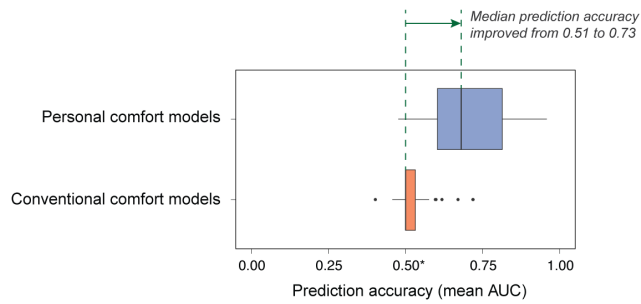
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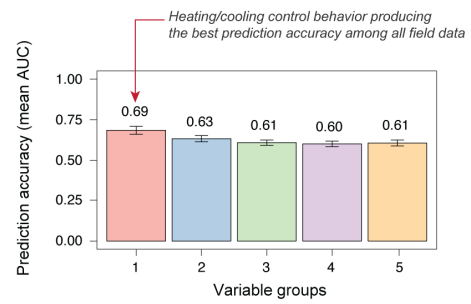
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Personal Comfort Models vs. Conventional Comfort Models



- Personal comfort models using six machine learning algorithms
- Conventional comfort models including PMV and adaptive models

Important Predictors for Personal Comfort



- 1: thermal control behavior
- 2: date/time
- 3: HVAC system
- 4: outdoor env.
- 5: indoor env.

Note: The plots represent the field data of 38 occupants in typical office conditions during Apr-Oct 2016. * indicates random guessing.

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