

## THERMAL COMFORT MONITORING IN COMMERCIAL BUILDINGS

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**ABSTRACT** This paper presents a system for thermal comfort monitoring using the Predicted Mean Vote (PMV). The system is capable of identifying opportunities for energy savings and indicating violation of occupants' thermal comfort. The system consists of multiple modules, including PMV scheduler, PMV thresholding, and PMV visualization (for both online and historical data monitoring). The system has been applied to real data from commercial buildings and interesting PMV-based charts have been obtained. However, since PMV computation requires sensors that are rarely available (e.g. air velocity), alternative approaches for determining PMV are reviewed, including PMV sensors and inferential techniques (soft sensors).