**Abstract**

Our method can calculate efficient operation scenario of air-conditioning system based on predicted PMV (Predicted Mean Vote) and energy consumption using deep reinforcement learning. This method realizes comfortable indoor space with efficient air-conditioning at the same time.

**Features**

- Predict PMV accurately based on predicted human flow, indoor temperature and humidity
- Control air-conditioning system based on current and future state by deep reinforcement learning

**Application Scenarios**

- Efficient and comfortable air-conditioning in shared space of shopping complex
- Efficient and comfortable air-conditioning in lobby or lounge of office building

**Roadmaps**

- Install it to urban improvement projects as an application of Digital Twin Computing for smart city.

**Collaboration Partners**

- East Japan Railway Company

**Exhibitors**

NIPPON TELEGRAPH AND TELEPHONE CORPORATION, NTT FACILITIES, INC., NTT DATA Corporation

Contact: rdforum-sv-ml@hco.ntt.co.jp