

Modelling and AI for Integration of Cyber and Physical World

Development of Weather Information Infrastructure for Autonomous Urban Cities Harmonized with Nature

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Summary :

In future smart cities, various autonomous systems work collaboratively for maintaining sustainable, safe and comfortable societies. These autonomous systems access real-time prediction information on the weather information infrastructure that reproduces the actual weather as well as social and economic activities into the cyber space. Each autonomous system, in return, provides IoT sensing data to the information infrastructure.

In this project, we focus on a densely build-up area, where weather and human activities are closely linked, and develop the weather information infrastructure in the cyber space based on the integrated technology of modelling and AI. We further construct a feedback loop among sensing (monitoring), prediction and actuation in order to realize an autonomously developing cyber-physical system. This will realize the autonomous smart cities harmonized with nature.

