

Team presentation

HAwAI - Laboratoire d'Informatique de Grenoble

HAwAI Human Aware Artificial Intelligence

As human intelligence is fundamentally rooted in human social interaction, we argue that Artificial Intelligence (AI) cannot be studied solely from the point of view of an isolated AI entity but necessitates being ?human aware?, explainable and empowering interactions with humans. We see AI as being a complement to human intelligence and not a replacement. Specifically, we develop and advance AI techniques that take into account human and social aspects. This involves giving humans a true social identity in AI systems.

To devise Human aware AI systems, members of the HAwAI team often work closely with other disciplines (cognitive science, sociology, philosophy, psychology, etc.) in order to share and advance the theories and methodologies and to construct human aware systems that are of societal value.

RESEARCH AREAS:

Agent Based Social Simulation (ABSS)

Human behaviour modelling and simulation, Belief-Desire-Intention (BDI) Architecture, cognitive modelling, social attachment, cognitive biases, human mobility modelling and simulation.

AI Planning and Scheduling

Reasoning and acting AI systems fulfilling complex user-assigned tasks.

Human-Robot Interaction

Acceptability, affective computing, dialogue

IMPACT AREAS:

Crisis and emergency management

Modelling and simulating human behaviour in earthquakes, floods, bushfires.

Autonomous vehicles in shared spaces

Modelling and simulating human behaviour in shared spaces with autonomous vehicles.

Collaborative robotics (Cobotics)

Robots working with humans in an industrial environment.

Manufacturing

Invent the "factory of the future". Human tasks optimised by AI scheduling and algorithms

Social Robotics

Social robots in daily life environment interacting closely with humans.

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