Models Speak. Agents Act.

Editorial Remarks · May 2026

The recent progress of artificial intelligence has been remarkable, driven largely by models that can generate text, images, code, decisions, and even scientific hypotheses. But a different question is now reshaping the field: how do we turn these capable models into systems that act reliably in the real world?

This is the shift from intelligent models to intelligent agents. A model produces an output when prompted; an agent pursues goals, plans actions, observes consequences, revises its strategy, and coordinates with humans and other agents. The change is not rhetorical. As enterprise AI moves from single-agent prompting toward coordinated multi-agent operations, the central problem has migrated: from scaling models to designing behavior under uncertainty, constraints, and competing objectives.

Computational intelligence is not a supporting toolbox for large models. It is the behavioral substrate that turns models into agents.

The reason is that the hardest problems of agentic AI are problems CI has worked on for decades, often under different names. Coordinating many agents without cascading failure is a problem of swarm stability and distributed search. Balancing safety against helpfulness is a multi-objective optimization problem, not a prompt-engineering one. Long-horizon planning under sparse rewards needs the credit-assignment and surrogate-assisted methods our community has been refining for years. And the recent wave of LLM-driven evolutionary search — where large models propose candidates and evolutionary loops select, recombine, and verify them — is producing interpretable, inspectable, formally verifiable control policies that purely neural approaches cannot match. This is not CI borrowing from the LLM era. It is the LLM era arriving at problems CI has been ready for.

The articles in this issue trace five faces of this transition: how agents perceive (LLM-based physiological signal decoding), how they feel (generative AI and affective computing), how they think efficiently (neuromorphic and energy-aware intelligence), how they are designed (neural architecture search), and how they decide under conflict (evolutionary multi-objective optimization for industrial decision-making). Read together, they sketch the contours of an agentic CI agenda.

For CIM, this moment matters. The magazine should be the venue where the CI community names, frames, and shapes the agentic turn rather than narrating it after the fact. We are particularly interested in submissions on multi-agent coordination grounded in CI principles, evolutionary optimization of agent architectures and prompts, safety and alignment treated as multi-objective problems, and agent behavior under genuine uncertainty. Models gave AI its capability. Computational intelligence will give it its conduct.

— Min Jiang Xiamen University, CHINA

All smiles in front of the magnificent UNESCO World Heritage Fujian Tulou in China: former CIM Editor-in-Chief Prof. Kay Chen Tan on the left and Min Jiang on the right.