

Challenges in Digital Media

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YDreams has developed YVision, a platform for digital media including computer vision, embodied interaction, embodied agents and simulation. The main concepts underlying this platform will be reviewed. YVision addresses "normal" digital media problems. YDreams has been working in three challenging problems that are beyond "normalcy". They include:

- Providing each city driver with an optimal route using information processed from traffic cameras and other sensors;
- Helping a famous soccer coach in optimizing space for his team, both on offense and defense, using video images;
- Translate partial differential equations into chemical reactions to enable chemical computing in any surface.

These problems will be defined and our approach to solve them presented. Hopefully, the audience will have better ideas.