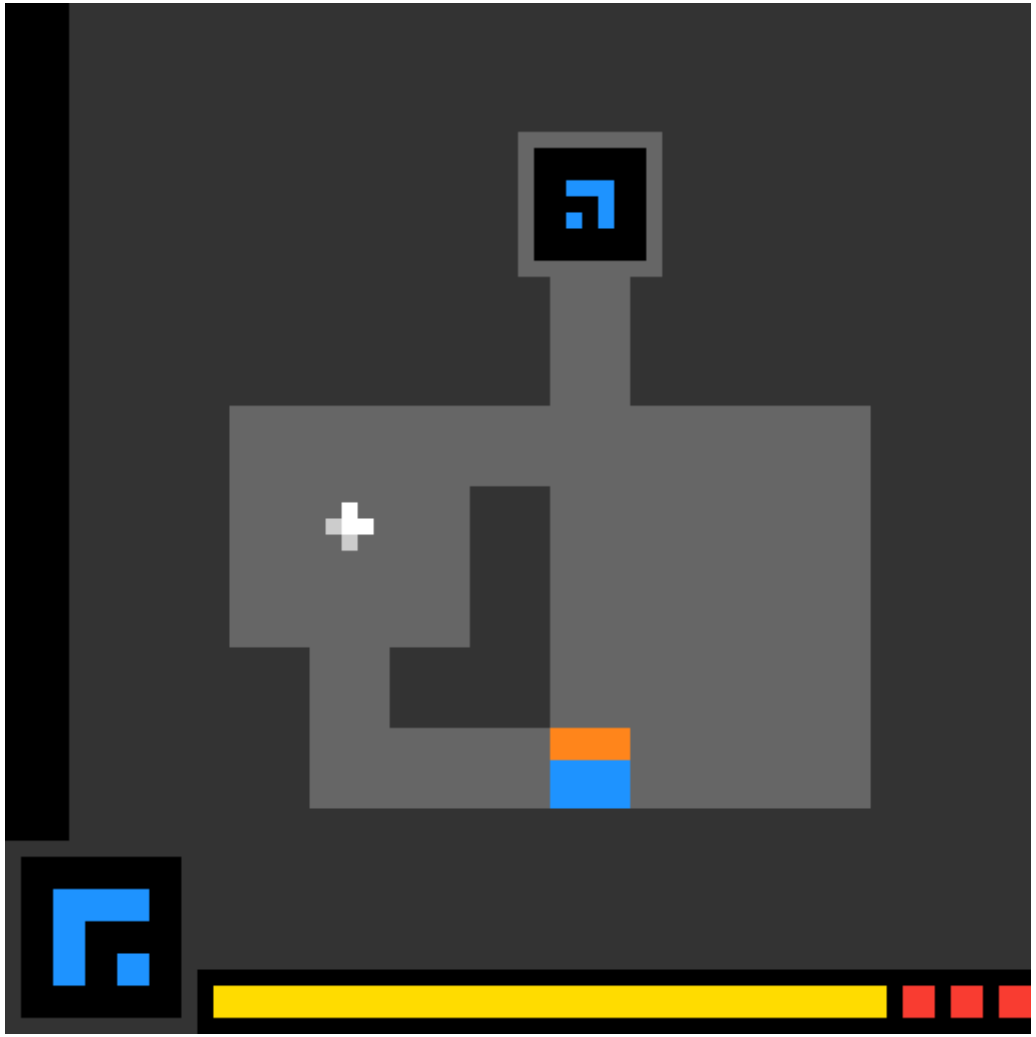
Solving the ARC-AGI 3 Challenge

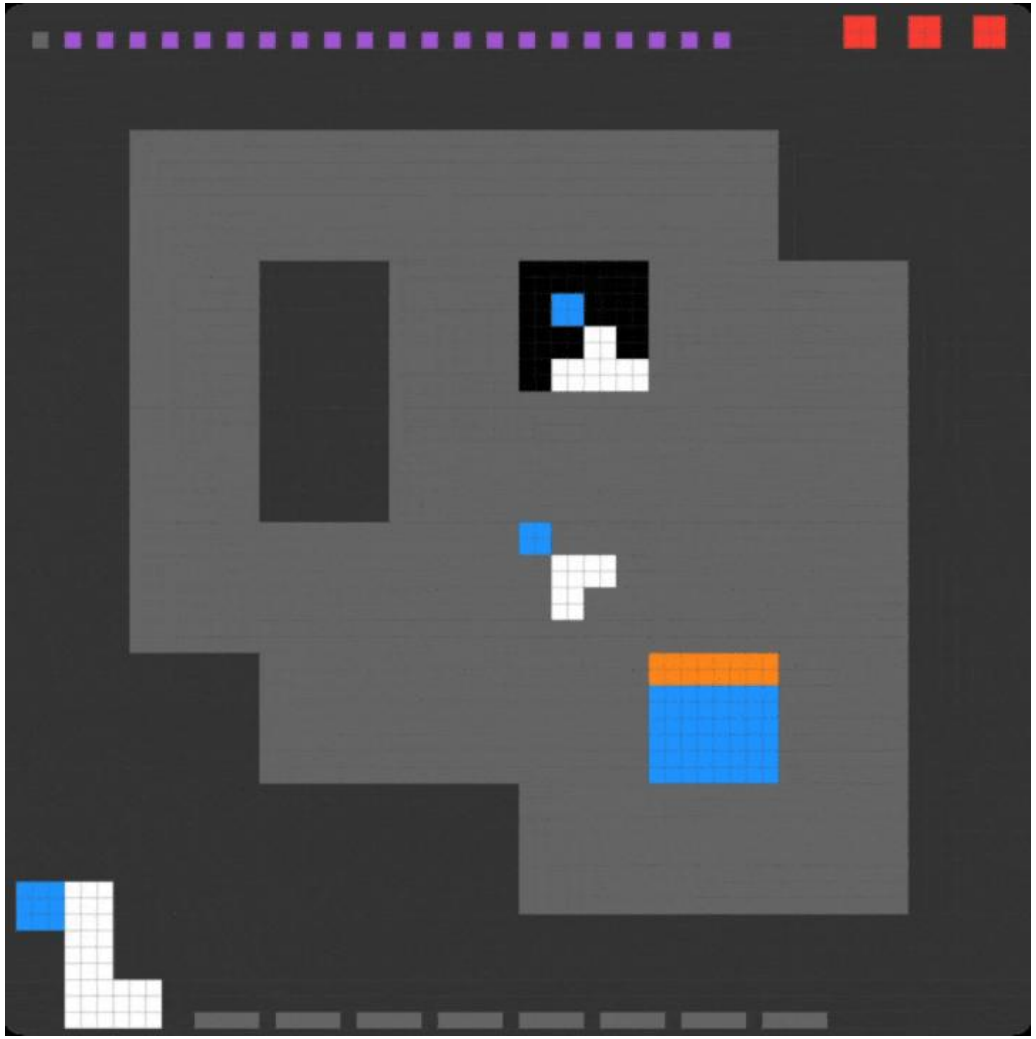
Shashank Agnihotri[1], Max Kahl[1,2], Steffen Jung[1], Margret Keuper[1,2]

[1]Chair for Machine Learning, University of Mannheim

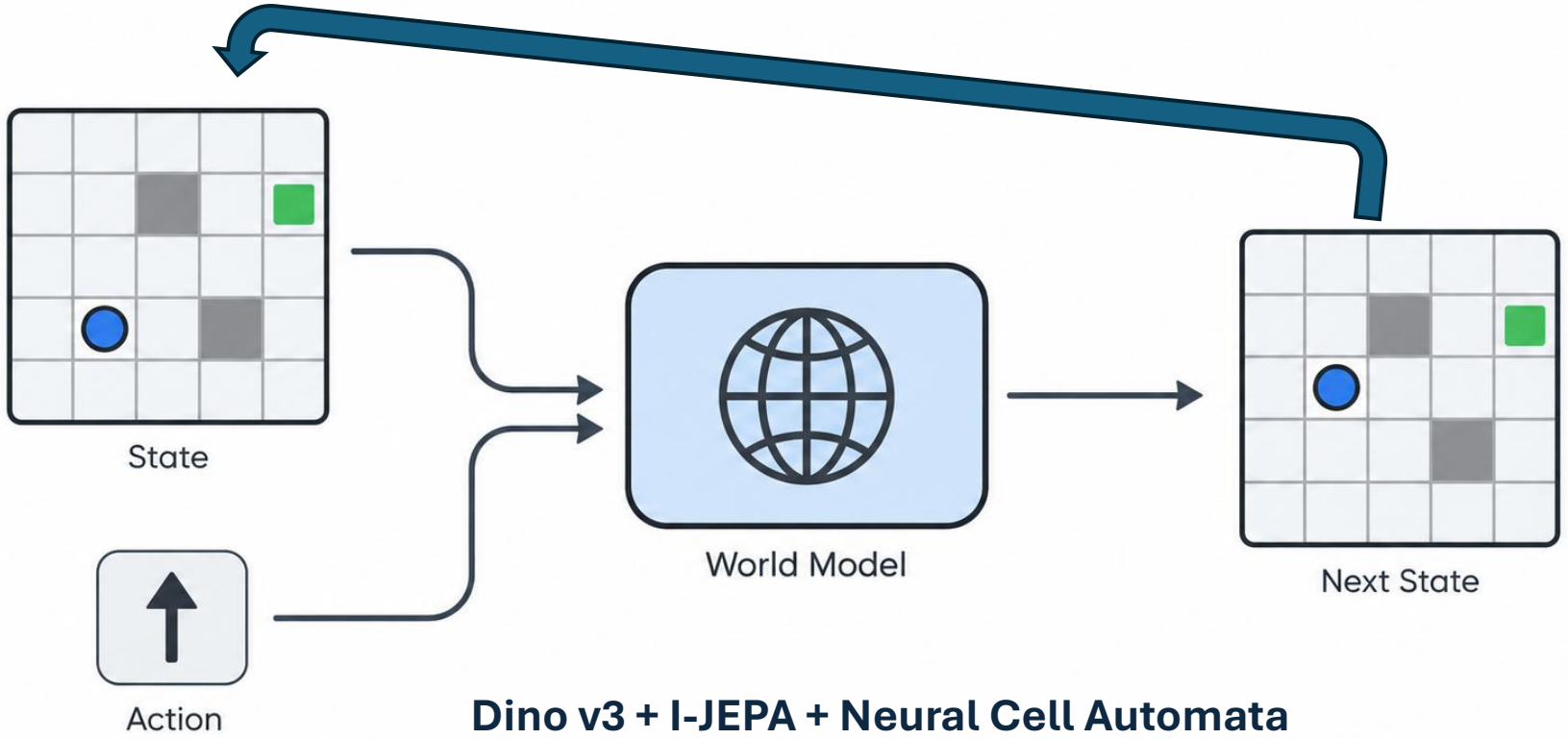
[2]Max Planck Institute for Informatics, Saarland Informatics Campus

What is the ARC-AGI 3 Challenge?



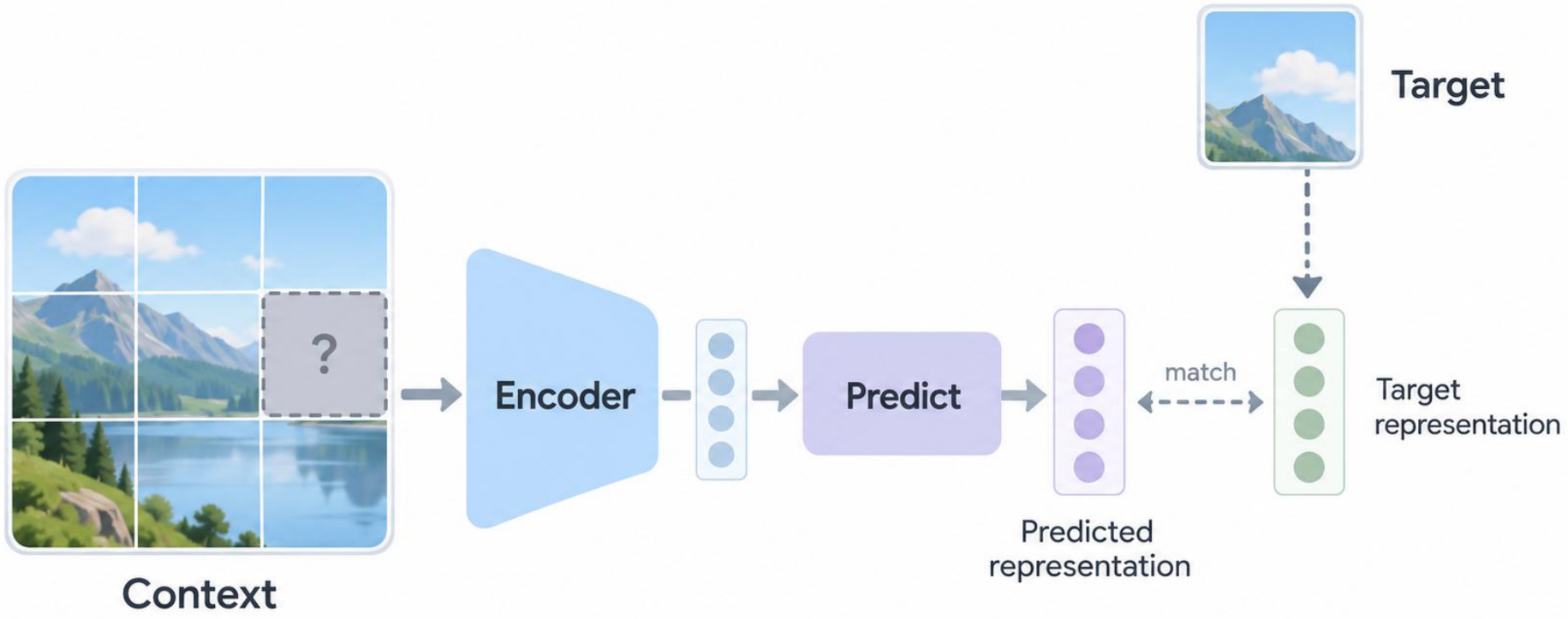


How do we solve this?



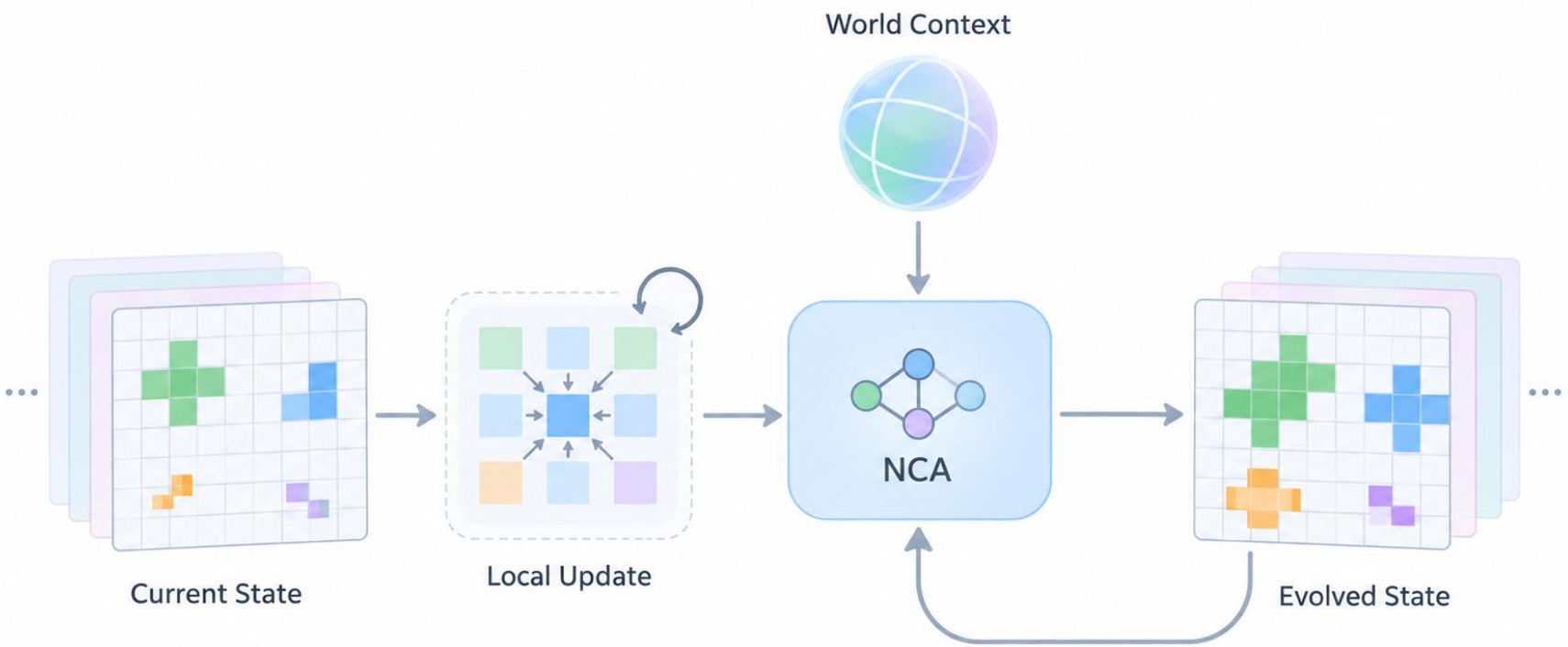
Dino v3 + I-JEPA + Neural Cell Automata

What is I-JEPA?



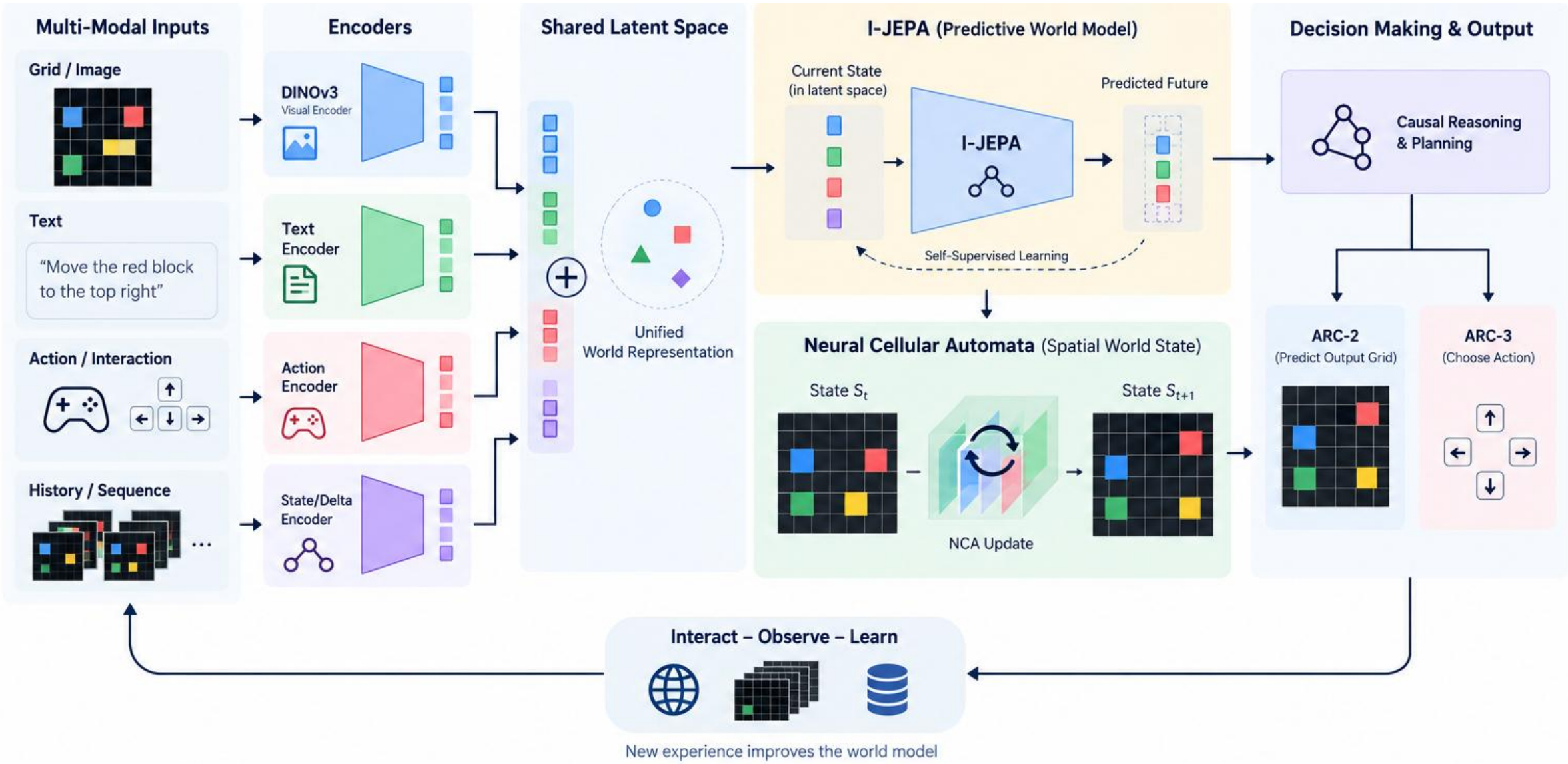
Predict representations, not pixels

Using NCA for decision making...



Local updates, global context, persistent memory

Complete Method



Compute

- 75,000 GPU Hours with H200s and B200s.
- Horeka Cluster
- Gemini Credits

What you get...

- Chance to work with High Performance Compute Clusters
- Work on world models
- Learn the latest in vision and representation learning research.

Useful Information

- Duration: 5-6 months
- Number of members: 2-6 (more the merrier, more things we can try)
- Online: Possible
- Structure: Bi-Weekly meetings
- Requirements: **Python, pytorch**, Deep Learning and Computer Vision
- Open for: EVERYONE, Language: English
- Goal: Publish the Benchmarking
- Contact: shashank.agnihotri@uni-mannheim.de, max.kahl@uni-mannheim.de