MIT Decentralized AI Program

Imagine billions of specialized AI agents collaborating across a decentralized architecture. Each performs discrete functions while communicating seamlessly, navigating autonomously, socializing, learning, earning and transacting on our behalf and our organizations. How can these agents communicate with each other across organizational silos?

The program focuses on building a scalable, responsible and open 'Internet of AI Agents'. The Agents'. The subcomponents include Agentic AI, EdgeAI/TinyAI, Knowledge Markets, Privacy-Markets, Privacy-preserving Machine Learning, Large Population Models and Decentralized Decentralized Infrastructure.

- Website: https://www.media.mit.edu/projects/decentralized-ai/overview/
- Events: https://mitdecai.org/
- Lead: Prof. Ramesh Raskar, MIT
- Contact: dec-ai@media.mit.edu

Program Membership Benefits

Working Group Participation

Working and Interest Groups: Members can join these groups to actively participate in developing specifications and guidelines, directly shaping DecAI standards.

Membership Tiers and Group Access:

- Diamond: Join 5 working groups and the steering board
- Platinum: Join 2 working groups
- Gold: Join 1 working group

Entrepreneurship

Decentralized AI Venture Hub: Access a directory of directory of dozens of startups who are joining joining DecAI and connect with them at the Annual Annual Summit.

Investor and VC Network: Tap into a network of of investors and venture capitalists.

Events, Research, Learning and Development

Events: Attend two annual summits and two online webinars, plus additional presentations and tutorials.

Research and Publications: Participate in a research symposium and gain early access to emerging DecAI technologies and standards.

Courses and Demo Day: Receive an invitation to the AI Venture Studio Course Demo Day.

Data Resources

Code Base and Data Sets:

- Access a growing collection of code and data sets
- Developer meetups

Working Groups

1. Agentic AI

- Autonomous Agent Collaboration
- Agent Standards and Coordination Protocols
- Ethical Considerations for Agentic AI
- Human-Agent Interaction
- Reflection and Reasoning
- Agent Identity and Wallets

2. Edge AI and Tiny AI

- Hardware and Software Optimization
- Model Compression and Quantization
- Federated Learning at the Edge
- Energy-Efficient AI
- Edge AI for IoT

3. Privacy

- Privacy-Preserving Machine Learning
- Trusted Execution Environments
- Differential Privacy and Homomorphic Encryption
- Secure Multi-Party Computation
- Data Minimization and Anonymization

4. Knowledge Markets

- Tokenization of Knowledge and Data
- Incentive Mechanisms for Data Data Sharing
- Decentralized Data Marketplaces
- Data Curation and Quality Control
- Intellectual Property and Data Ownership

5. Large Population Models

- Agent Based Modeling
- Tensorised Programming
- Scalability and Differentiability
- Collective Intelligence
- Applications and Partnerships

6. Infrastructure and Registries

- Decentralized Compute Resources
- Distributed Storage Solutions Solutions
- Interoperability Standards
- Identity and Access Management
- Registries and Certification

Membership Levels

Diamond

5 Working Groups+

Steering Committee member +

Startup Networking

Platinum

2 Working Groups +

Events +

Startup Networking

Gold

1 WG + Events

Supporter

VC or Startups (under $20M raised): 1

Working Group + Events