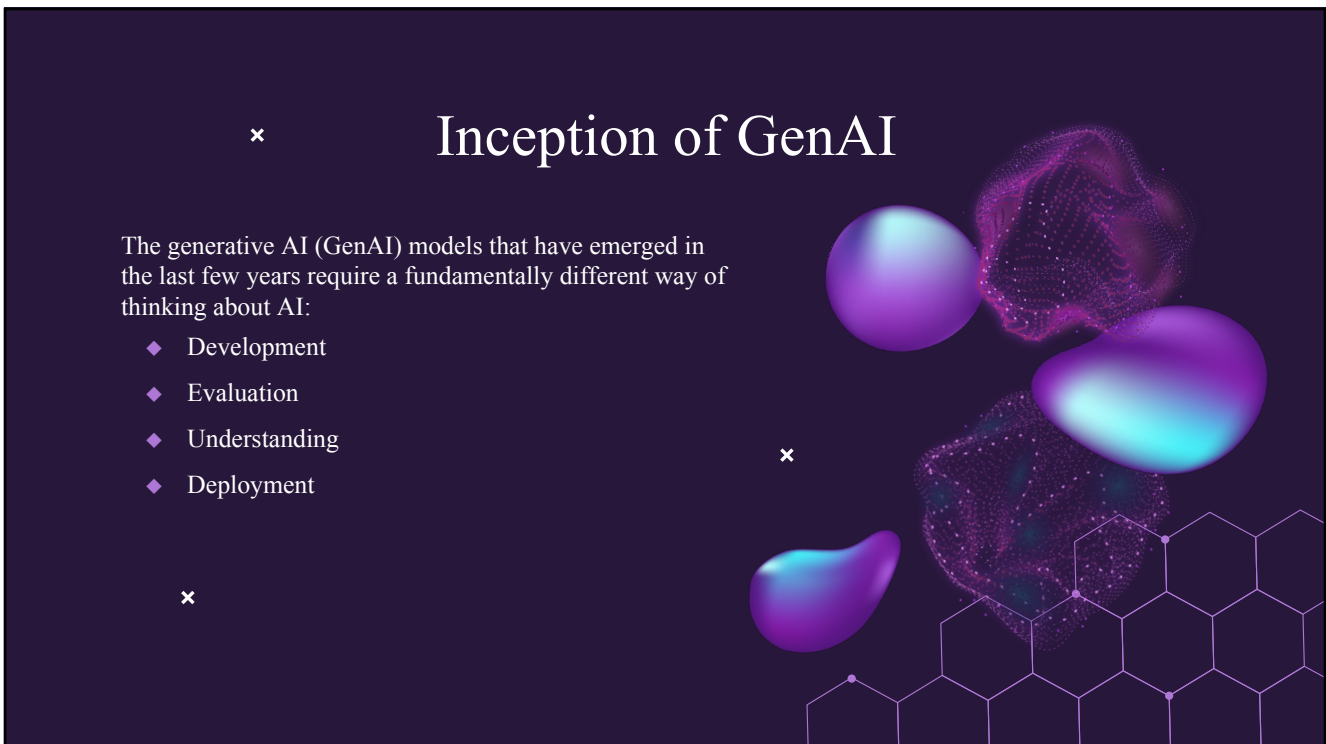




Paradigm Shift

- ◆ Science incrementally progresses
- ◆ Some problems persist
- ◆ Paradigm shift makes problems trivial
- ◆ Theory of relativity replaced Newtonian mechanics




Inception of GenAI


The generative AI (GenAI) models that have emerged in the last few years require a fundamentally different way of thinking about AI:

- ◆ Development
- ◆ Evaluation
- ◆ Understanding
- ◆ Deployment

What has changed




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Past


AI was based on explicit, transparent, and interpretable mechanisms.

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Now


The models are too large, interactive, nonlinear, and opaque, in the same way brains are.



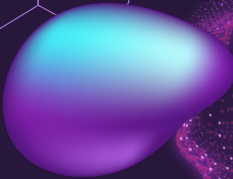
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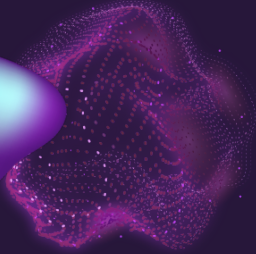
Evaluating GenAI



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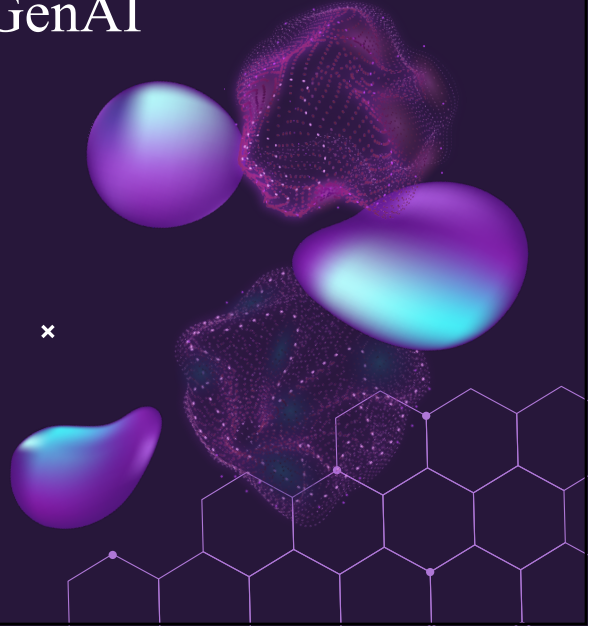
Evaluating GenAI

Whereas much of past AI was designed to be measured in a particular task or dataset, GenAI models aim at general performance that is not defined by any task in particular

- ◆ Qualitative, not quantitative

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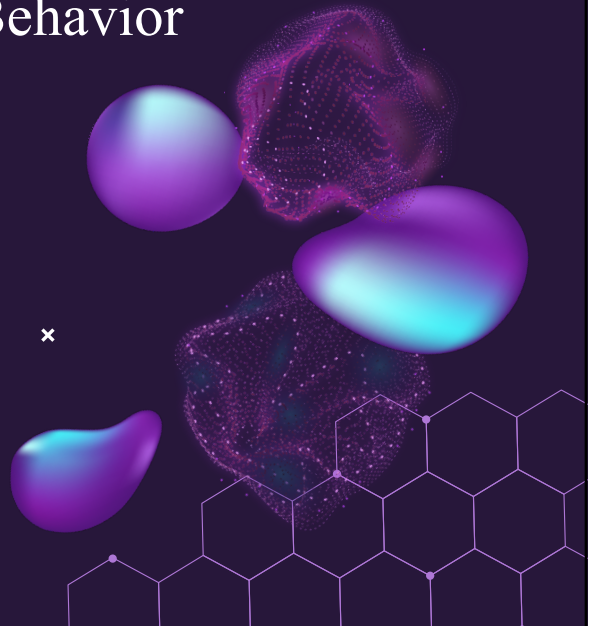
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Human-like Behavior

Often the first answer is incomplete or incorrect, but further interaction gets to the right piece of knowledge. The model has that knowledge, but it is tricky to get to it.

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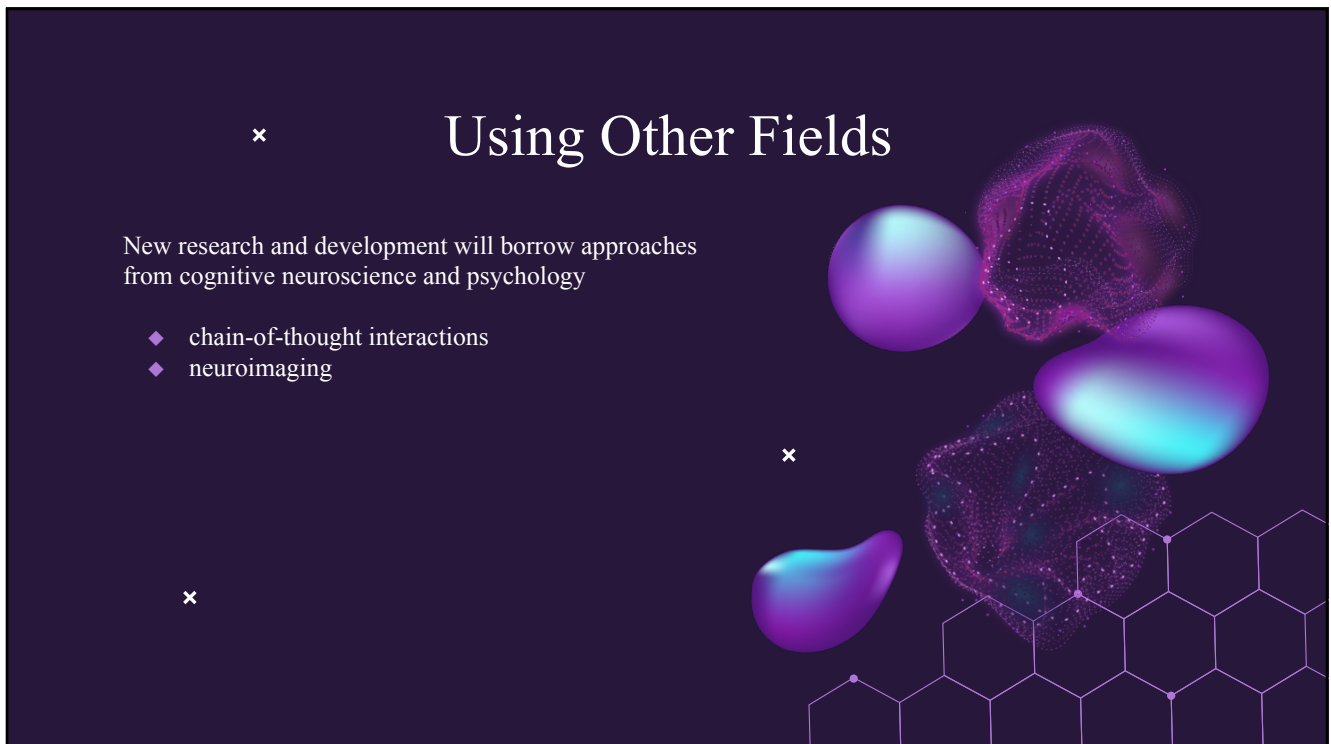
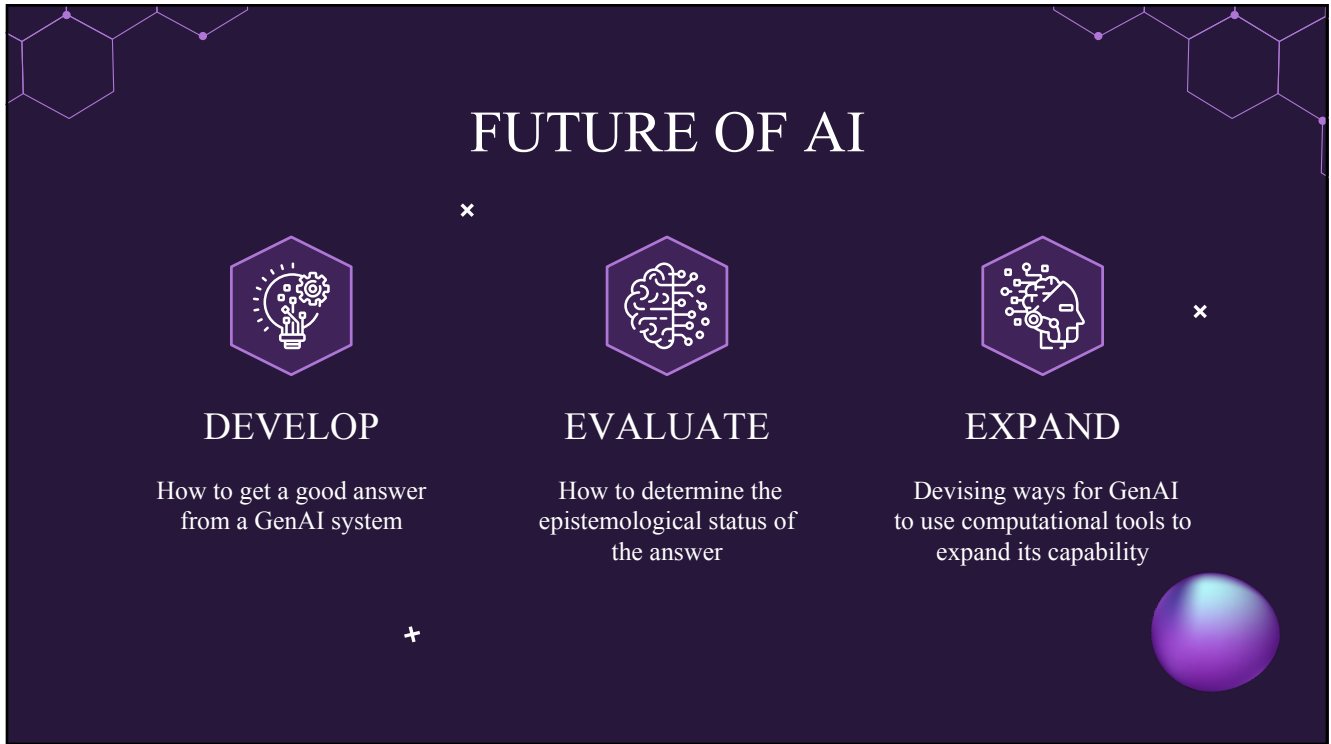


Individuals

GenAI systems are individuals, not mechanistic devices that can be rebuilt multiple times.



03
Future of AI

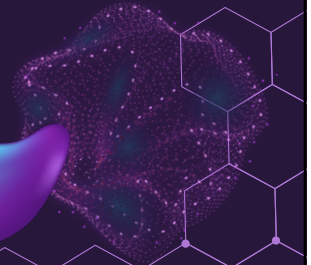


04

Questions/Discussion



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× Discussion Questions

1. Is a paradigm shift necessary to advance AI in its current form?
2. Are GenAI models too complicated for us to understand?
3. Are GenAI models comparable to human intelligence?
4. How helpful are cognitive neuroscience and psychology to AI

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