What does flow matching produce?

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- a vector field
- an image
- a latent space
- a model

Flow matching generalizes the denoising process of diffusion models

Suggestions from Getty Images

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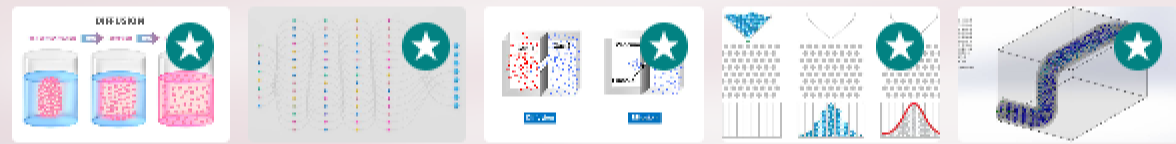
True

False

Diffusion models and flow matching models can both be used to map gaussian distributions to target distributions

Suggestions from Getty Images



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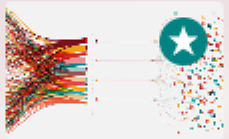
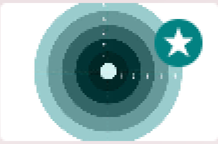
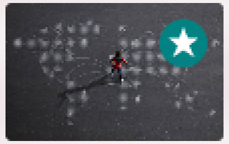
True

False

Flow Matching maps a Gaussian distribution to a target one by learning ______________

Suggestions from Getty Images

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- how to move each individual sample in discrete time steps
- how to classify points from the sample distribution
- to regress on the sample data, regressing on the error, and repeating this
- a time-dependent vector field that corresponds to probability density path

Flow Matching works by approximating the _______ that transports the source to the target distribution.

- Probabilistic Differentiable Equation (PDE)
- Stochastic Differentiable Equation (SDE)
- Ordinary Differentiable Equation (ODE)
- Equation (E)

Which of these requires class information for constructing probability paths?

Suggestions from Getty Images

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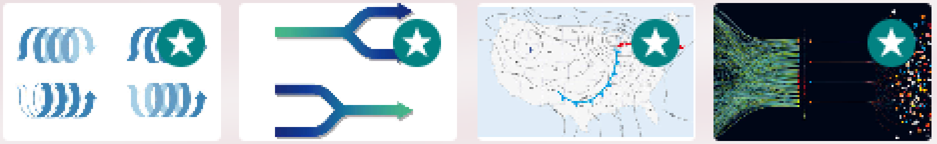
- General flow matching
- Conditional flow matching
- Diffusion
- K-Means

What does the vector field approximated by flow matching do?

Suggestions from Getty Images



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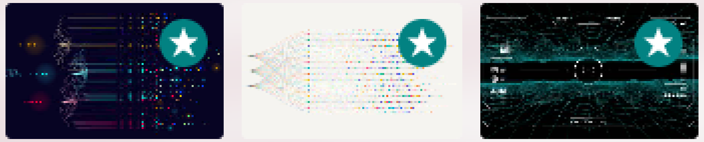
- ▲ "Transports" points from a target distribution to a source distribution
- ◆ "Moves" points away from the center of a given distribution
- ● "Transports" points from a source distribution to a target distribution ✓
- ■ "Edges" points towards a dataset's center of mass

What is NOT an INTIAL input to the learned vector field (the trained model) during inference?

Suggestions from Getty Images



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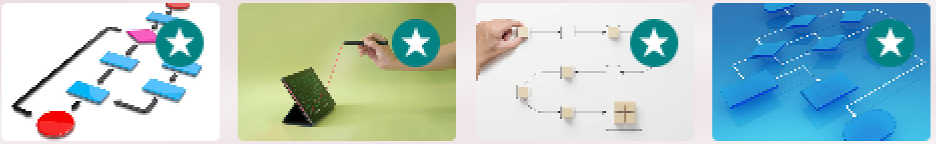
- Sample point from the target distribution ✓
- Class information
- Current time
- Intermediate point ✓

What is a (current) use case of flow matching?

Suggestions from Getty Images



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- ▲ Image generation ✓
- ◆ Text generation
- ● Image classification
- ■ Speech generation ✓

Flow Matching is cooler than Diffusion

Suggestions from Getty Images

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True

False