Comparison: N-gram vs RNN vs LSTM

Feature	N-gram	RNN	LSTM
Memory Type	Fixed window	Fading	Selective
Long Context	☐	☐	☐
Parameters	Few	Moderate	Many
Training Speed	Fast	Medium	Slow
Vanishing Gradient	N/A	Yes ☐	Solved ☐
Best For	Short (2-3 words)	Medium (10 words)	Long (50+ words)
Example	"I love..."	"The cat sat..."	"The cat, who was...finally..."