

Pick one question under each category to write a brief response to. Discuss with neighbors.

Neural Computation

- How can we represent text, images, and other data as sequences?
- How can we process and generate sequences using neural nets?
- How can models capture and use nuanced long-range relationships?

ML Systems

- How do we evaluate language models?
- Can I run an LLM on my laptop? Can I train one?
- How do I get good-quality results from an LLM?
- How can I use an LLM to make a (semi-)autonomous agent?

Learning Machines

- How can we learn without labeled data? (self-supervised learning)
- How do **foundation models** learn generalizable patterns from massive datasets?
- How can generative agents learn to improve their behavior from feedback?
- Some current models can learn at **test time** (e.g., in-context learning); how does this work?

Context and Implications

- What might a bad future with AI look like? How will you work to prevent it?
- What might a good future with AI look like? How will you work towards it?

This course

What part of this class was most helpful to your learning? What part was least helpful?