Overview of Leading AI Frontier Models

Key Points

- Open source AI models include Meta's Llama series
- Debate over "open source" vs. "open weight"—weights are public, but not training data/methods
- "Frontier models" usually refers to big closed source models, but sometimes includes open source
- OpenAI's GPT series is the most famous, starting with GPT-3.5 (ChatGPT) in Nov 2022
- Latest version mentioned is GPT-5, which merges previous GPT and "O" model lines
- Anthropic's Claude is a major competitor, created by ex-OpenAI staff
- Claude comes in Haiku (small), Sonnet (medium, most powerful currently), and Opus (large)
- Claude powers Claude Code, a coding agent platform
- Google's Gemini is their main closed source model, evolved from the earlier Bard (which was poorly received)
- Gemini 2.5 Pro is current, Gemini 3 release is imminent; smaller Gemini models available free/cheap for students
- Grok from Elon Musk's xAI is the fourth major closed source model
- Other notable models: Perplexity, Cohere (Canada), Mistral (France, both open and closed source)
- The "big four" closed source models: GPT (OpenAI), Claude (Anthropic), Gemini (Google), Grok (xAI)
- Course will cover and compare all four major models, with practical demos and selection guidance in week four