Question:
What is the main argument of the paper?
Answer:
The main argument of the paper is that large language models (LLMs), such as Generative Pre-trained Transformers (GPTs), exhibit traits of general-purpose technologies and could have considerable economic, social and policy implications. The paper provides evidence for this argument in several ways:
1) The authors develop a new rubric for assessing the exposure of occupations and tasks to LLM capabilities. Using this rubric, they find that most occupations in the U.S. labor market have at least some degree of exposure to LLMs, with higher wage occupations generally exhibiting higher exposure.
2) The authors show that LLMs meet two key criteria for general-purpose technologies: they are improving over time and have the potential for widespread impact across the economy. The paper documents the rapid progress in LLM capabilities in recent years. And the authors' analysis of occupational exposure suggests LLMs could significantly impact a diverse range of jobs.
3) The authors argue that the impact of LLMs is likely to persist and increase over time, even if progress in developing new capabilities slows or stops. This is because the growing use of LLMs and complementary technologies built on top of them will continue to drive increased economic effects.
4) The authors find that the potential impact of LLMs expands greatly when considering the development of complementary tools and software built on top of the models. Their analysis suggests complementary technologies could double the impact of LLMs on exposure. This reinforces the general-purpose nature of LLMs.
5) The authors conclude that because LLMs meet the criteria for general-purpose technologies, they could be difficult for policymakers to predict and regulate. But understanding their capabilities and potential impacts can help in navigating policy issues around AI and the future of work.
So in summary, the central argument of the paper is that LLMs exhibit traits of general-purpose technologies, and as a result, they are likely to have significant and pervasive—though hard to predict—effects on the economy, labor market and society. Policymakers and stakeholders need to understand these models to help address related policy challenges.