

Artificial Intelligence Can(t) Solve the Climate Crisis

Cody Hays

Arizona State University

Abstract

As wildfires rage and ice caps melt, Silicon Valley's latest sales pitch is that artificial intelligence (AI) can cool the flames - but this technological fix is riddled with the same toxic unsustainability that ignited the crisis in the first place. This paper argues that AI, as currently developed, perpetuates advanced capitalism's agenda, thus failing to address the climate crisis effectively. Examining capitalism's historical environmental impact reveals how each industrial wave has deepened ecological degradation. Drawing from critical theorists like including Marx, Debord, Baudrillard, and Jameson, the paper debunks the myth of AI as a climate panacea, exposing its hidden environmental costs. By 2027, AI servers could consume 134 terawatt-hours annually, matching the electricity use of entire countries like Argentina, the Netherlands, and Sweden. Case studies illustrate how AI reproduces exploitative capitalist logic. However, a proposed fifth industrial wave, featuring accessible cognitive AI and human-machine integration, showcases AI's potential for sustainable futures through grassroots initiatives — but only if action is taken to reform technological development values. Realizing AI's potential for climate mitigation requires rethinking the values driving technological development, aiming for an AI paradigm that prioritizes people and the planet over endless growth.

Keywords: capitalism, climate change, environmental justice, technological innovation, sustainability