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# Computer Science > Computation and Language

**\*\*arXiv:2205.01068v1\*\*** (cs)

[Submitted on 2 May 2022 (this version), \_latest version 21 Jun 2022\_  
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# Title:OPT: Open Pre-trained Transformer Language Models

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Models, by Susan Zhang and 18 other authors

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> Abstract:Large language models, which are often trained for hundreds of

> thousands of compute days, have shown remarkable capabilities for zero- and

> few-shot learning. Given their computational cost, these models are  
> difficult to replicate without significant capital. For the few that are  
> available through APIs, no access is granted to the full model weights,  
> making them difficult to study. We present Open Pre-trained Transformers  
> (OPT), a suite of decoder-only pre-trained transformers ranging from 125M to  
> 175B parameters, which we aim to fully and responsibly share with interested  
> researchers. We show that OPT-175B is comparable to GPT-3, while requiring  
> only 1/7th the carbon footprint to develop. We are also releasing our  
> logbook detailing the infrastructure challenges we faced, along with code  
> for experimenting with all of the released models.

Subjects: | Computation and Language (cs.CL); Machine Learning (cs.LG)

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