

Genomic Foundation Model

HyenaDNA is a genomic foundation model pretrained on the human reference genome using the Hyena architecture.

- Scales sub-quadratically
- 1M token context

- Single-nucleotide tokens
- Need long-range range + high resolution

DNA is extremely challenging to learn from - it requires long-range interactions and high resolution at single nucleotide level.



HyenaDNA: Long-Range Genomic Sequence Modeling at Single Nucleotide Resolution

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- 160x faster than Transformer
- convolutions &
- for attention







