## Training compute (FLOPs) of milestone Machine Learning systems over time

1e+24 Domain Deep Learning Era ⇔ Vision 1e+22 □ Language O Games Other 1e+20 △ Large Scale Training compute (FLOPs) 1e+18 Pre 1e+16  $\Diamond$ **♦** ø 1e+14 ø  $\Diamond$ 0 Ф 1e+12  $\Diamond$ 1e+10 0  $\Diamond$ 1e+8 earning Era 1e+6 O Scale 1e+4 Large 1e+2 1984 1988 1992 1996 2000 2004 2008 2012 1964 1968 1972 1976 1980

**Publication date**