

Method	Time	Space	Time (Learning)
Conventional NN	$\mathcal{O}(d^2)$	$\mathcal{O}(d^2)$	$\mathcal{O}(ntd^2)$
Circulant NN	$\mathcal{O}(d \log d)$	$\mathcal{O}(d)$	$\mathcal{O}(ntd \log d)$