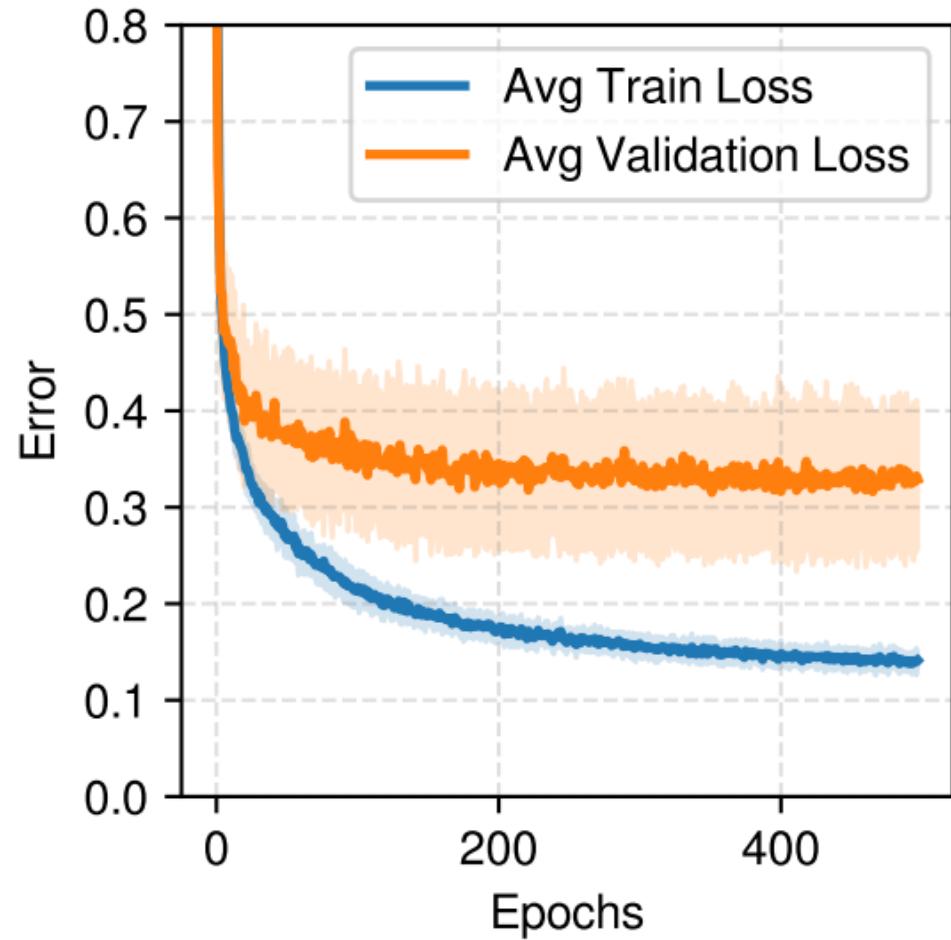


### hardness network



### corrosion network

