Model

eqV2 DeNS

ORB MPtri

SevenNet

MACE

CHGNet

M3GNet

ALIGNN

MEGNet

CGCNN

BOWSR

Dummy

Voronoi RF

CGCNN+P

0.815 5.042 0.771

0.765 4.702 0.719

0.567 3.206 0.490

0.507 2.855 0.436

0.500 2.563 0.392

0.423 1.964 0.300

0.333 1.579

0.185 1

DAF \uparrow Prec \uparrow Acc \uparrow TPR \uparrow TNR \uparrow MAE \downarrow RMSE \downarrow R² \uparrow

0.941 0.864 0.953 0.036

0.724 4.252 0.650 0.904 0.818 0.919 0.048 0.092

0.669 3.777 0.577 0.878 0.796 0.893 0.057 0.101

0.613 3.361 0.514 0.851 0.758 0.868 0.063 0.103

0.569 2.882 0.441 0.813 0.803 0.813 0.075 0.118

0.510 2.959 0.452 0.826 0.585 0.870 0.130 0.206

Wrenformer 0.466 2.256 0.345 0.745 0.719 0.750 0.110 0.186

0.241

0.154

0.818 0.605 0.857

0.922 0.817 0.941 0.045 0.091

0.841 0.672 0.872 0.093 0.154

0.786 0.693 0.803 0.113 0.182

0.712 0.718 0.693 0.118 0.167

0.668 0.535 0.692 0.148 0.212

0.687 0.232 0.769 0.124 0.184

0.085

0.138 0.233

0.788

0.756

0.750

0.697

0.689

0.585

0.297

-0.248

-0.603

-0.018

-0.329

0.019

0.151

Training Set

146K (1.6M) (MPtrj) 31.2M

146K (1.6M) (MPtri) 25.2M

146K (1.6M) (MPtrj) 842.4K

146K (1.6M) (MPtrj) 412.5K

227.5K

167.8K

167.8K

26.2M

128.4K (N=10)

128.4K (N=10)

5.2M (N=10)

4.0M

146K (1.6M) (MPtrj) 4.7M

63K (188.3K) (MPF)

155K (MP 2022)

133K (MP Graphs)

133K (MP Graphs)

Model Params Targets Date Added

EFS_D

EFS_D

EFS_C

EFS_C

EFS_CM

EFS_C

Ε

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2024-10-18

2024-10-14

2024-07-13

2023-07-14

2023-03-03

2022-09-20

2023-06-02

2022-11-14

2022-12-28

2023-02-03

2022-11-26

2022-11-17

2022-11-26