Model

eqV2 S DeNS

ORB MPtri

SevenNet

MACE

CHGNet

M3GNet

ALIGNN

MEGNet

CGCNN

BOWSR

Dummy

CGCNN+P

Wrenformer

Voronoi RF

F1 ↑

0.765 4.7

0.724 4.25

0.613 3.36

0.569 2.88

0.567 3.21

0.507 2.85

0.466 2.26

0.423 1.96

0.333 1.58

0.185 1

2.96

2.56

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

0.904 0.818 0.919 0.048

0.953

0.036

0.045

0.057

0.093

0.13

0.138

0.113

0.148

0.11

0.868 0.063

0.813 0.803 0.813 0.075 0.118

0.085

0.091

0.092

0.101

0.103

0.154

0.206

0.233

0.182

0.186

0.167

0.212

0.788

0.756

0.75

0.697

0.689

0.585

0.297

-0.603

-0.018

0.019

0.151

-0.329

0.864

0.922 0.817 0.941

0.878 0.796 0.893

0.841 0.672 0.872

0.826 0.585 0.87

0.818 0.605 0.857

0.786 0.693 0.803

0.745 0.719 0.75

0.668 0.535

0.712 0.718 0.693 0.118

0.687 0.232 0.769 0.124

0.692

0.851 0.758

0.941

0.65

0.514

0.441

0.452

0.436

0.345

0.241

0.154

0.3

0.49

Training Set

146K (1.6M) (MPtrj) 31.2M

146K (1.6M) (MPtrj) 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)

-0.248 133K (MP Graphs)

Model Params Targets Date Added

EFS_D

EFS_D

EFS_C

EFS_C

EFS_CM

EFS_C

Energy

Energy

Energy

Energy

Energy

Energy

Energy

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