

List of Acronyms

A-HDM Alternating Hybrid Distance Minimization

A-PDM Alternating Point Distance Minimization

A-QI Alternating Quasi-Interpolation

A-SDM Alternating Standard Distance Minimization

A-TDM Alternating Tangent Distance Minimization

A-TDMLM Alternating Tangent Distance Minimization Levenberg-Marquardt

AI Artificial Intelligence

BERT Bidirectional Encoder Representations from Transformers

BFGS Broyden-Fletcher-Goldfarb-Shanno

BIDGCN Boundary Informed Dynamic Graph Convolutional neural Network

CAD Computer Aided Design

CAE Computer Aided Engineering

CAGD Computer Aided Geometric Design

CAM Computer Aided Manufacturing

CEN CENTripetal

CHL CHord-Length

CNN Convolutional Neural Network

DAG Directed Acyclic Graph

DGCNN Dynamic Graph Convolutional Neural Network

DHD Direct Hausdorff Distance

DL Deep Learning

DOFs Degrees Of Freedom

GCN Graph Convolutional neural Network

GD Gradient Descent

HB-spline Hierarchical B-spline

HDM Hybrid Distance Minimization

HLBFGS Hybrid Limited memory Broyden-Fletcher-Goldfarb-Shanno

HSD Hausdorff Distance

IRLS Iterative Reweighted Least Squares

J-PDM Joint Point Distance Minimization

LBFSGS Limited memory Broyden-Fletcher-Goldfarb-Shanno

LPSP Local Projection Shape-Preserving parameterization weights

LS Least Squares

MAX MAXimum error

ML Machine Learning

MLP Multi Layer Perceptron

MSE Mean Squared Error

NN Neural Network

NURBS Non Uniform Rational B-Spline

PARCNN PARAmeterization with Convolutional Neural Network

PARGCN PARAmeterization with Graph Convolutional neural Network

PC Parameter Correction

PDM Point Distance Minimization

PPN Parameterization for Polynomial curve Network

QI Quasi-Interpolation

RECD RECiprocal Distance parameterization weights

ReLU Rectified Linear Unit activation function

RES RESidual neural network

rWLS reWeighted Least Squares

STD STandarD

TDM Tangent Distance Minimization

THB-spline Truncated Hierarchical B-spline

TRA TRAnsformer encoder

UNI UNIform

UNIF UNIForm parameterization weights