

1991-1999

2000-2004

2005-2009

2010-



Features

Real, Reactive
Power '92
Transients '93
Harmonics '95

Current Wavelet
Transform '00
Duration '03

Current '06
Current/Voltage Noise '07
Voltage '07

EMI '10
Eigenvalues of Current '10
Device Correlation '10

Supervised algorithms

Rule-based '91
Similarity search '92
Neural networks '94
HMMs '92

kNN '00
SVM '00
Likelihood ratios '02
AR, ARMA '04
Dynamic programming '04

SVM, RBFN '07
Integer Programming '08
Decision Trees '09
AdaBoost '09

Bayesian classifiers '10
Sparse Coding '10
Dynamic BNs '11
Closure Rules '12
Tensor Factorization '14

Semi- and un-supervised algorithms

Hierarchical clustering '07

Factorial HMM '11
Duration PDF '11
AFAMAP '12
HDP-HSMM '12
Motif Mining '12
Contextually supervised '14