|  |  |  |  |
| --- | --- | --- | --- |
|  | ARIMA | SVR | ANN |
| Pro | * Effizient (Adhikari 2014) | * Lineare Zusammenhänge (Adhikari 2014) * Nonlineare Zusammenhänge (Han 2014, Adhikari 2014) * wenig Daten notwendig (Wu 2008) * Variablenselektion * Kann globales Maximum finden (Han 2014) * It has strong generalization ability (Adhikari 2014) and faster convergence speed (Wu 2008) | * Nonlineare Zusammenhänge * Variablenselektion * Gut für lange Zeitreihen? (Han 2014) * non-parametric and nonlinear modeling skill, flexible and data-driven nature, good generalizationability, and reasonably good accuracy. (Adhikari 2014) * RNN kann auch time dependency (Adhikari 2014) |
| Contra | * Lineare Zusammenhänge – accuracy kann leiden (Adhikari 2014) * Easy to be disturbed by noise (Wu 2008) | * the training time scales somewhere between quadratic and cubic with respect to the number of training samples (Deng 2005) | * Generalization nicht gut (overfitting – due to opaque structure?) (Deng 2005) * Bleibt evtl auf lokalem maximum hängen (Deng 2005, Adhikari 2014) * -> sensibel für festgelegte Architektur und gefütterte Daten (Adhikari 2014) * Computational cost RNN > FNN (Adhikari 2014) |

De Oliveira (2014) erwähnt genau diese drei Methoden.

Taghizadeh: MLP-ANN

Kourentzes on ANN: These issues pose a series of challenges in selecting the most appropriate

model for practical applications and currently no universal guidelines exist

on how best to do this.