References

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People used machine learning to solve this problem before. But they tried to apply Support Vector Machines which owns better generalization classification ability compared with other machine learning methods like artificial neural network (ANN). But the learning speed of classical Support Vector Regression (SVR) is low, since it is constructed based on the minimization of a convex quadratic function subject to the pair groups of linear inequality constraints for all training samples.

In order to solv this problem, I want to use a new learning algorithm called extreme learning machine (ELM) for single-hidden layer feedforward neural networks (SLFNs) which randomly chooses hidden nodes and analytically determines the output weights of SLFNs. In theory, this algorithm tends to provide good generalization performance at extremely fast learning speed.