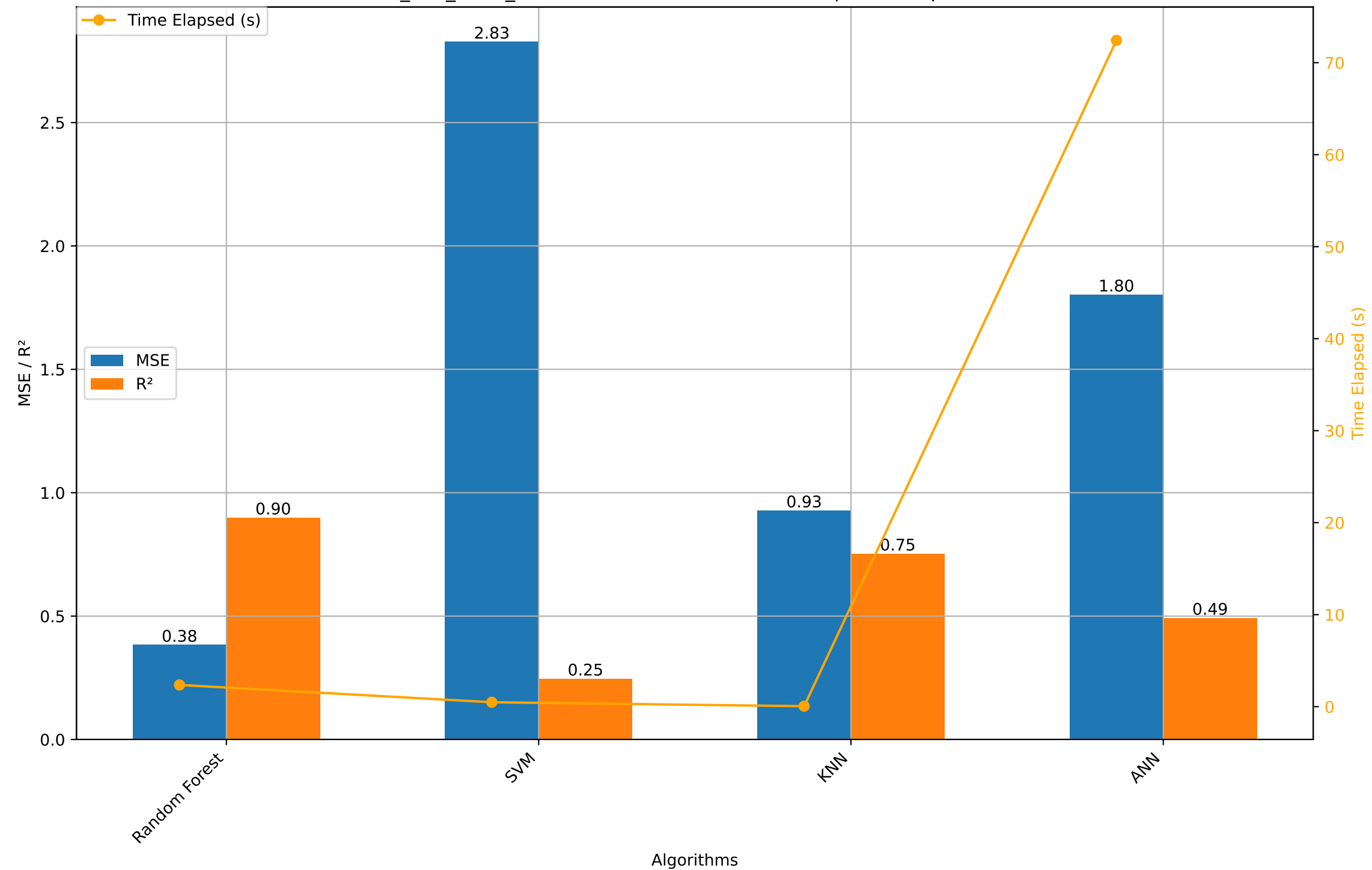
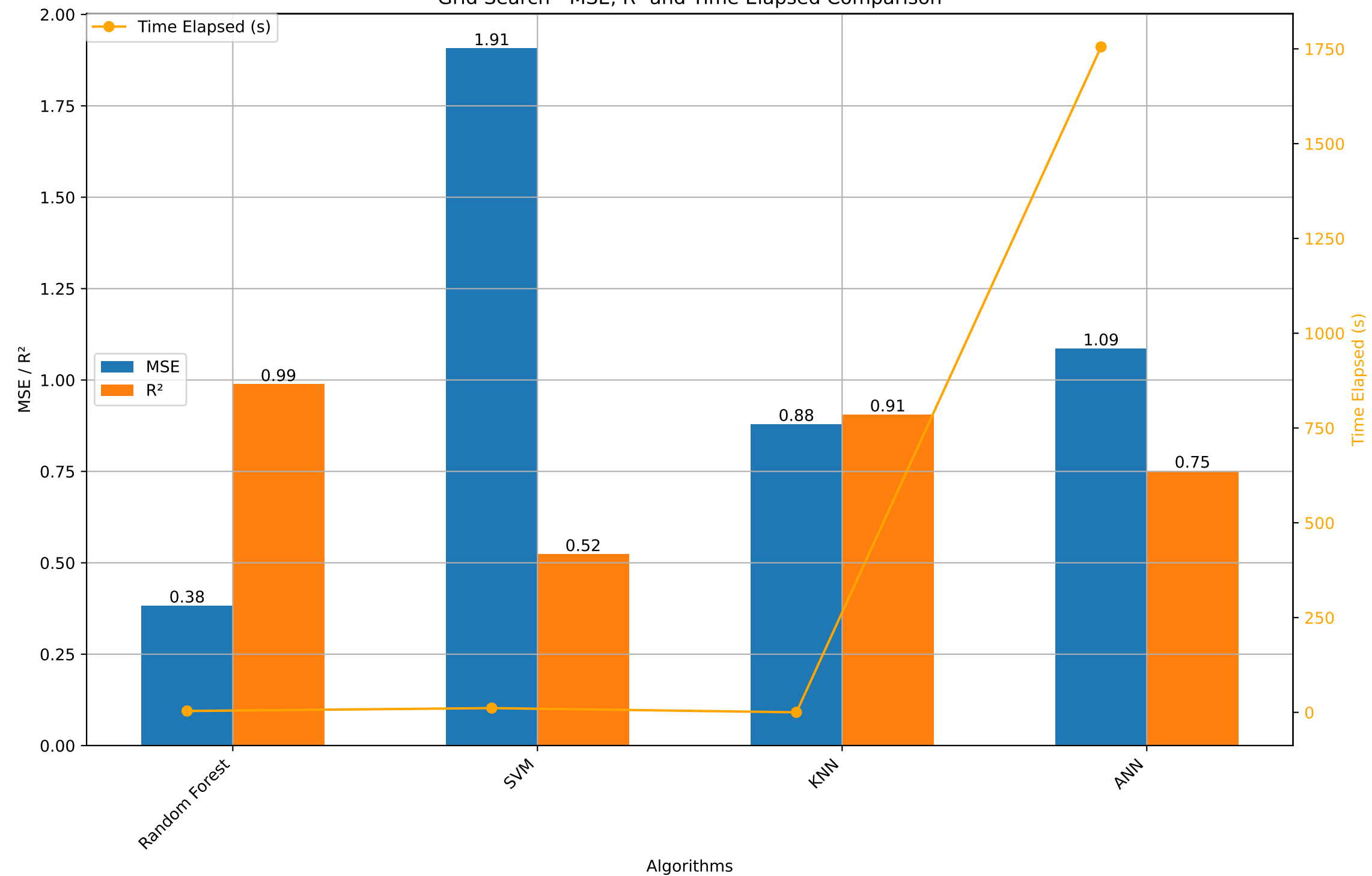
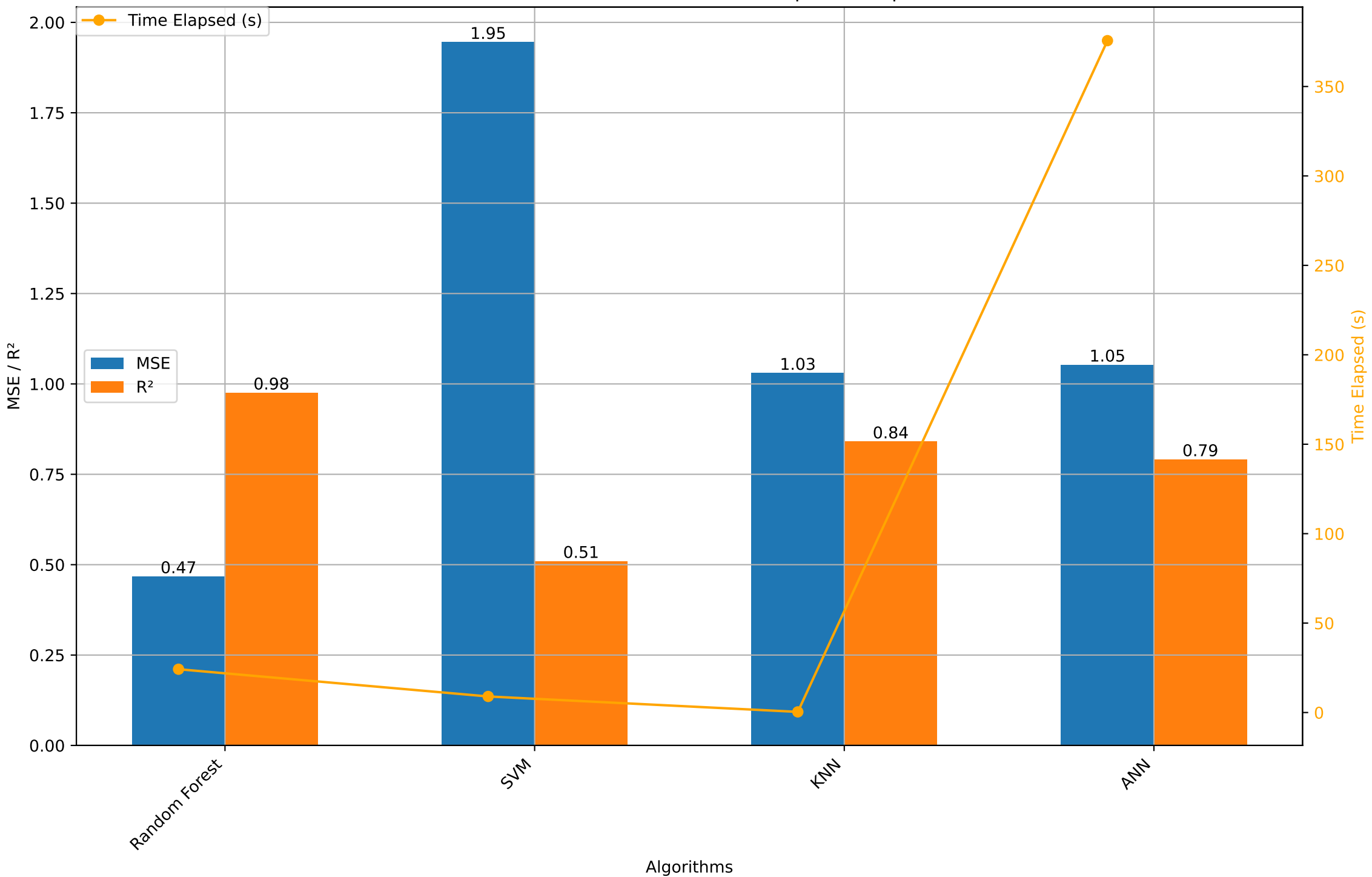


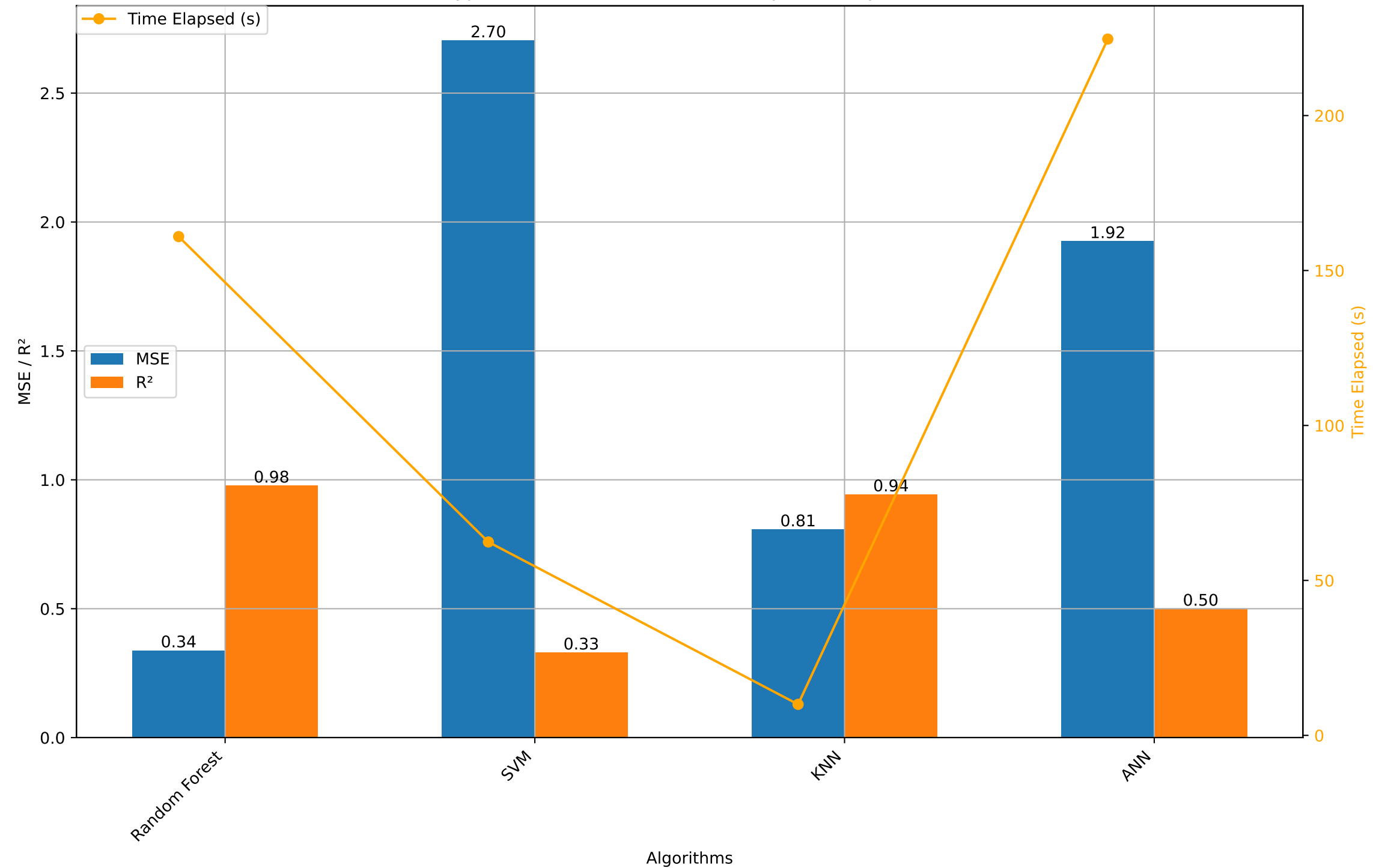
3\_fold\_cross\_validation - MSE, R<sup>2</sup> and Time Elapsed Comparison



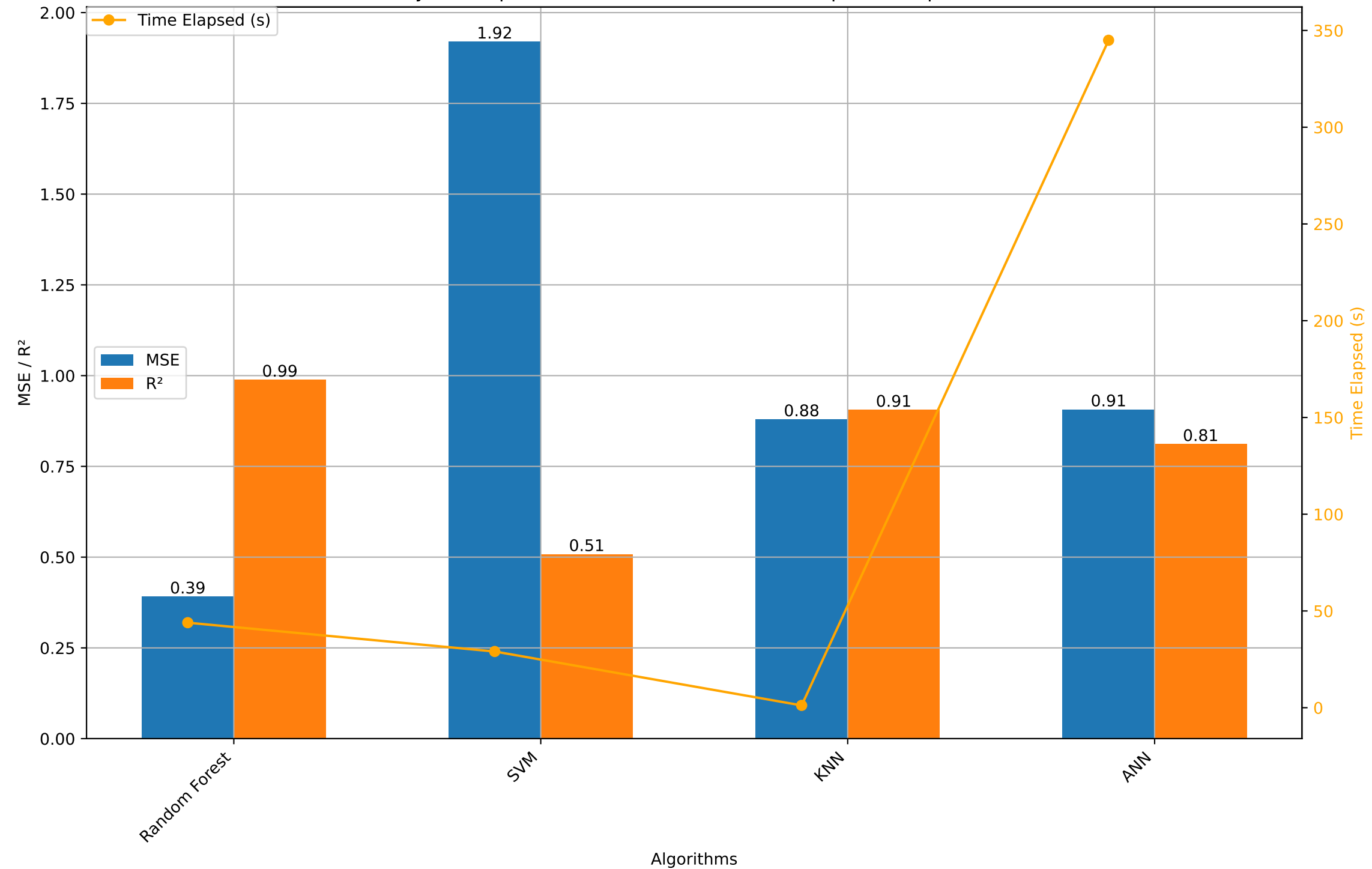
Grid Search - MSE, R<sup>2</sup> and Time Elapsed Comparison

Random Search - MSE, R<sup>2</sup> and Time Elapsed Comparison

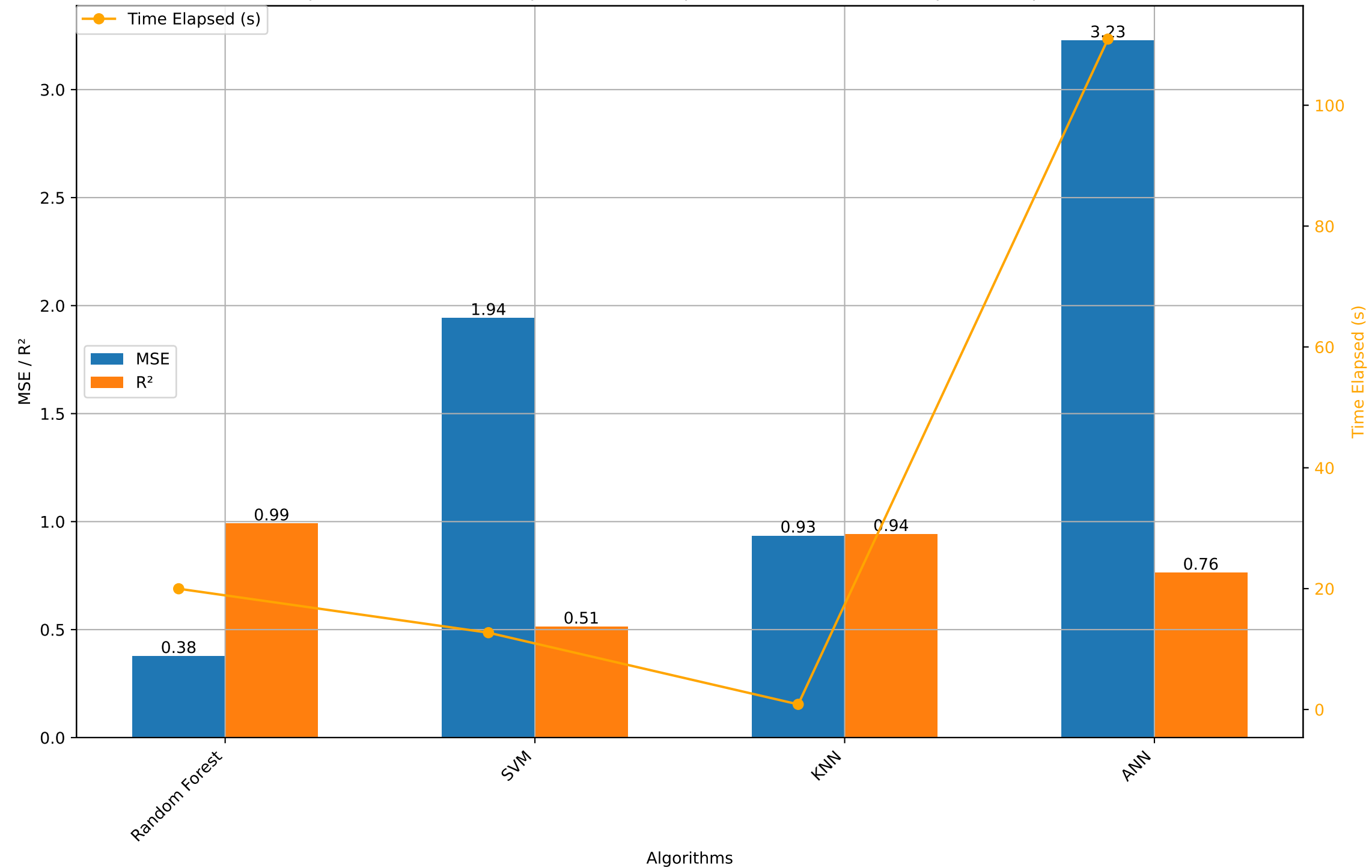


Hyperband - MSE, R<sup>2</sup> and Time Elapsed Comparison

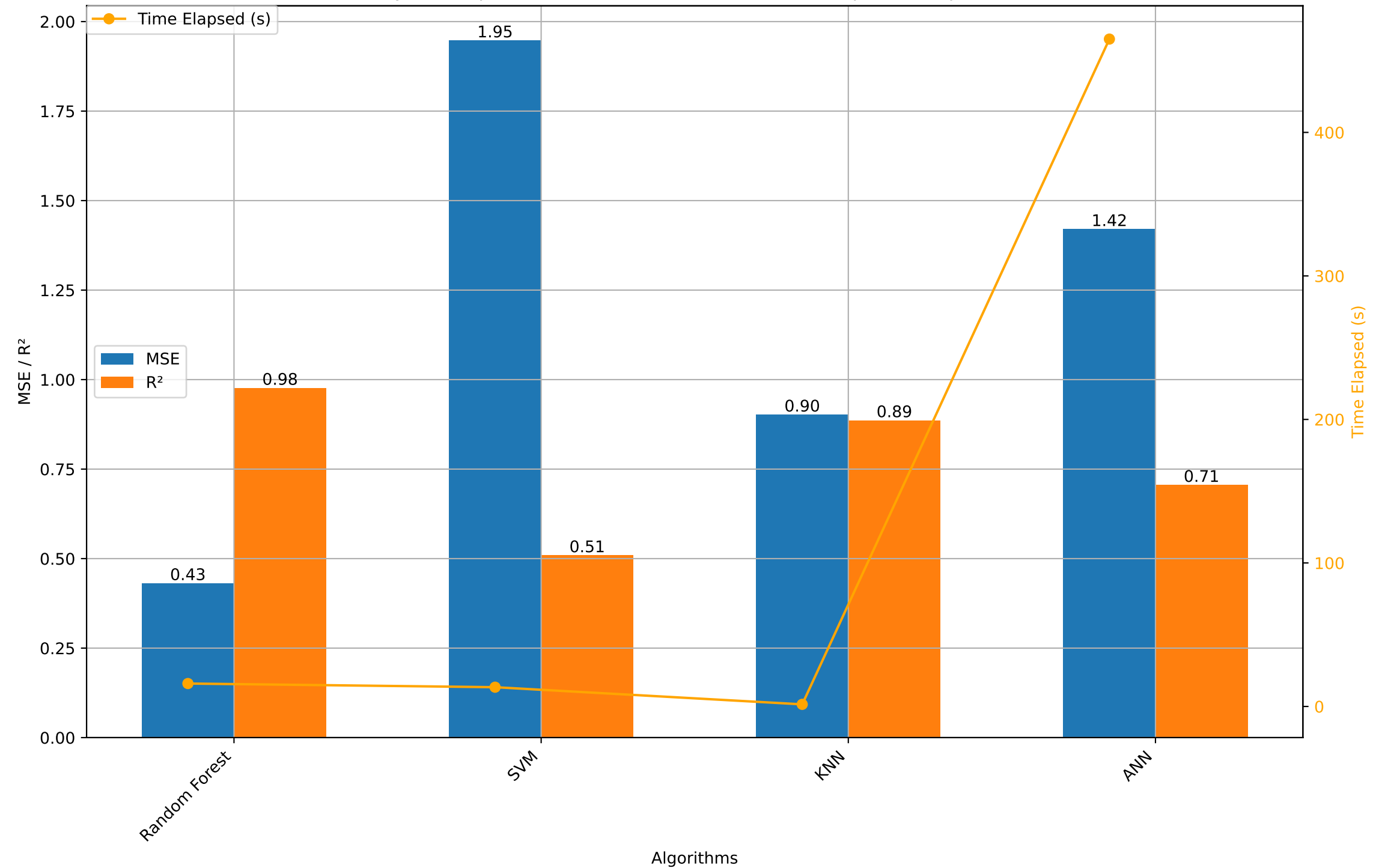
Bayesian Optimization - MSE, R<sup>2</sup> and Time Elapsed Comparison



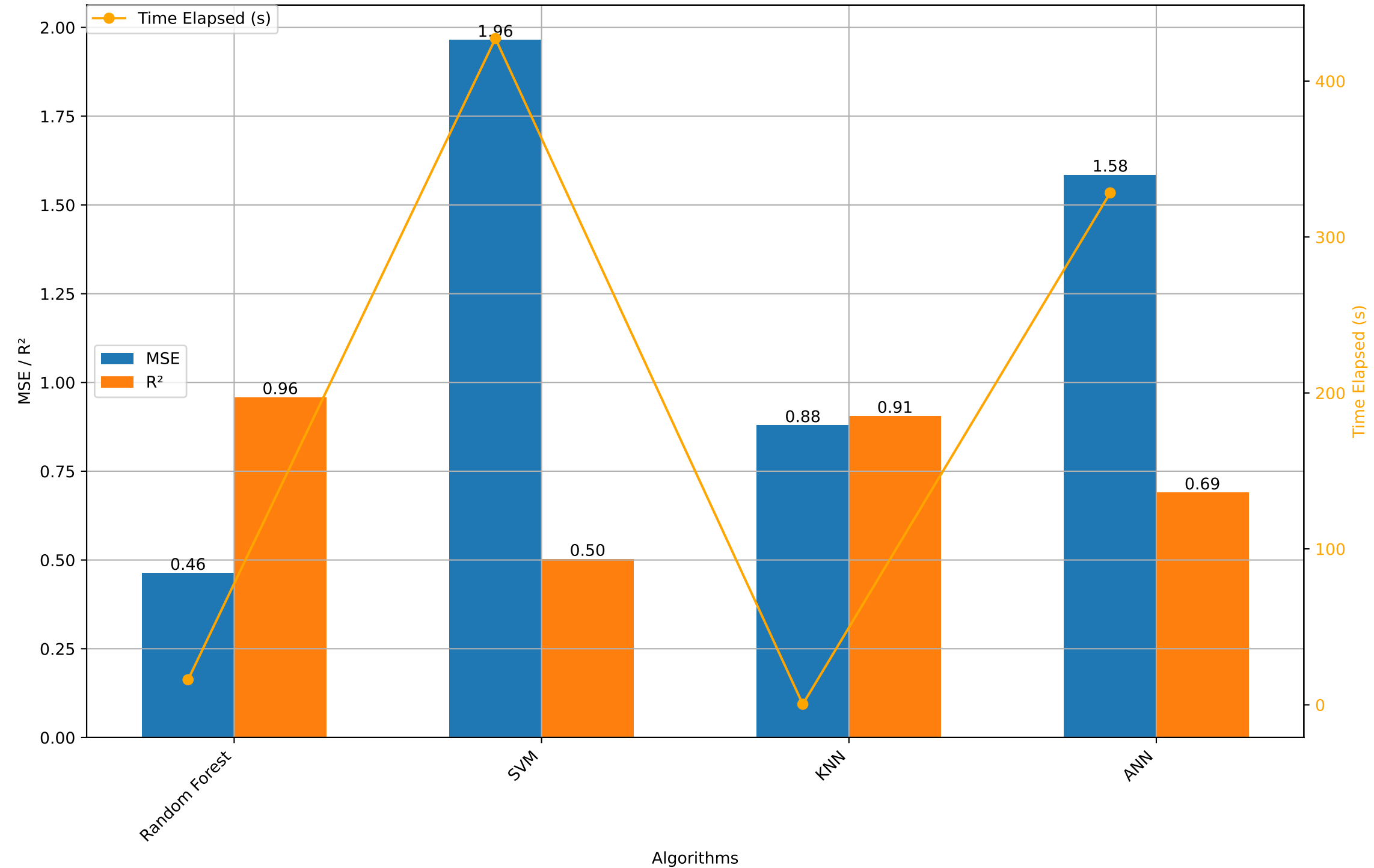
Sequential Model-Based Optimization (skopt) - MSE, R<sup>2</sup> and Time Elapsed Comparison



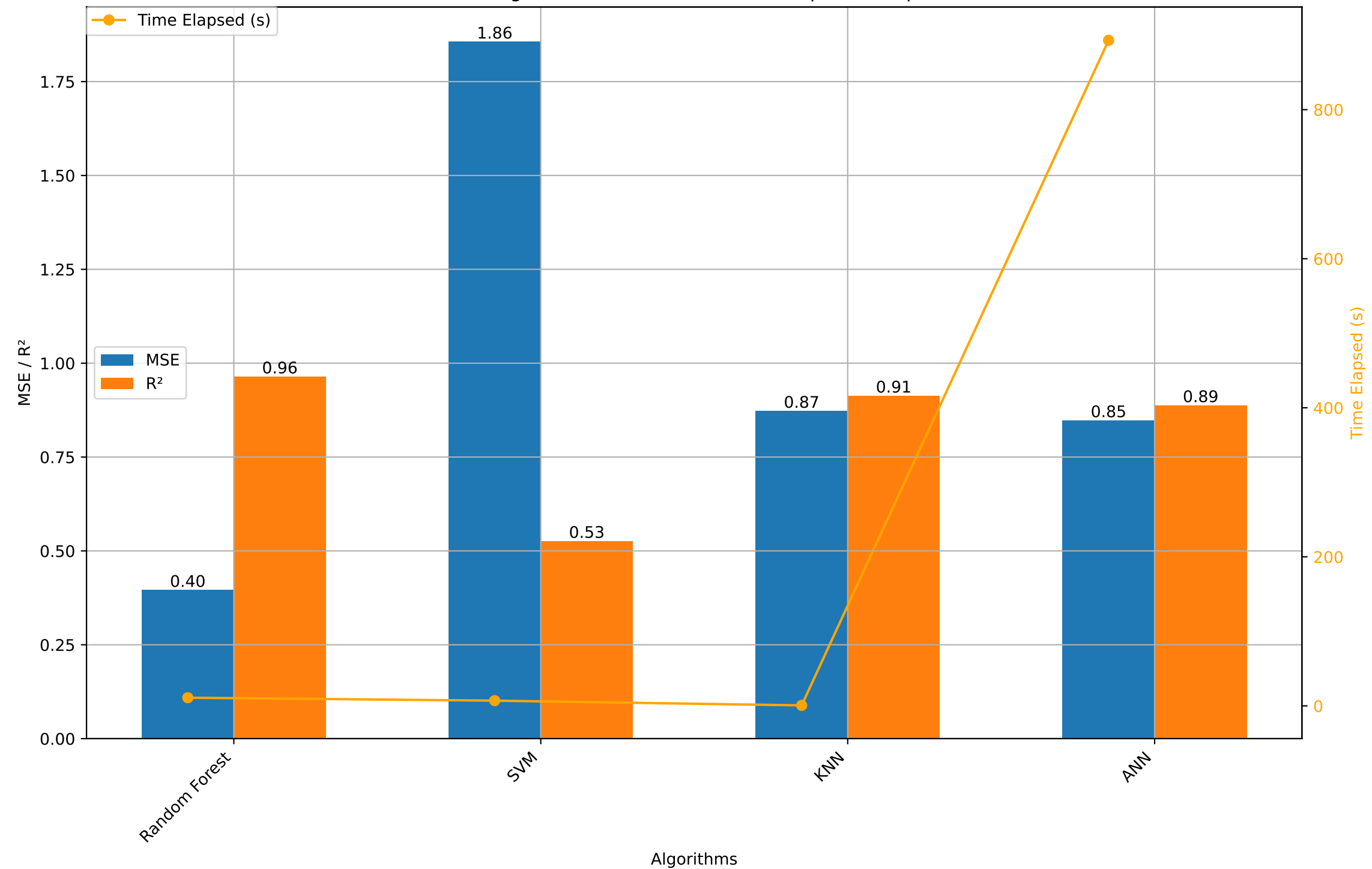
Bayesian Optimization TPE - MSE, R<sup>2</sup> and Time Elapsed Comparison



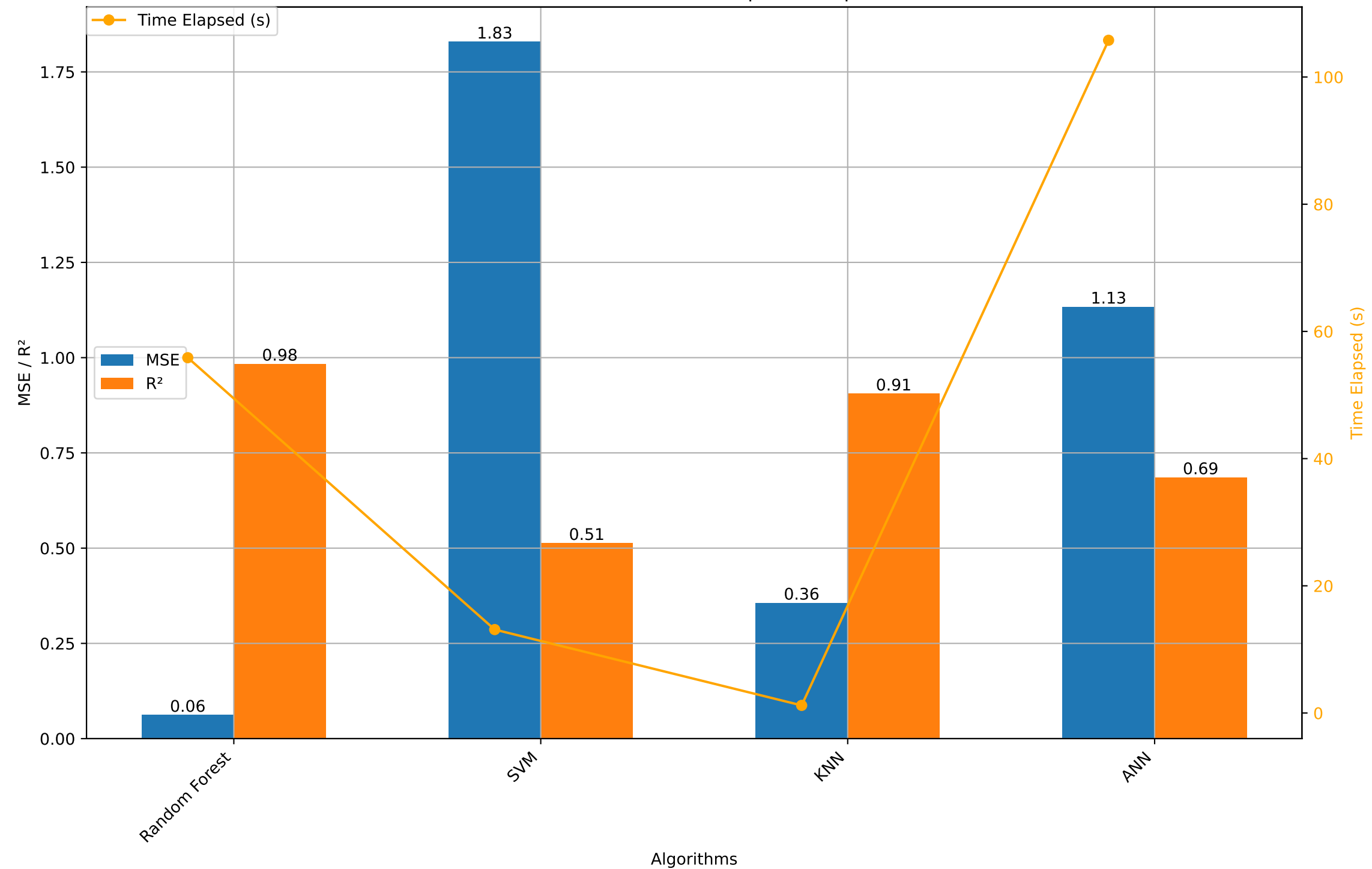
Particle Swarm Optimization - MSE, R<sup>2</sup> and Time Elapsed Comparison





Genetic Algorithm - MSE, R<sup>2</sup> and Time Elapsed Comparison

TPOT - MSE, R<sup>2</sup> and Time Elapsed Comparison



Best Algorithm and Procedure Summary:

Procedure	MSE Winner	MSE Value	R² Winner	R² Value	Time Winner	Time Elapsed (s)
3_fold_cross_validation	Random Forest	0.3827151584869346	Random Forest	0.8986218030736044	KNN	0.05
Grid Search	Random Forest	0.3824135363887852	Random Forest	0.9881153916171194	KNN	0.13
Random Search	Random Forest	0.4671705801810509	Random Forest	0.9753393589996944	KNN	0.36
Hyperband	Random Forest	0.3374139388697589	Random Forest	0.9765438772583164	KNN	10.01
Bayesian Optimization	Random Forest	0.3907172234050858	Random Forest	0.9880774322825432	KNN	1.2
Sequential Model-Based Optimization (skopt)	Random Forest	0.3763864620623288	Random Forest	0.9902956570670632	KNN	0.85
Bayesian Optimization TPE	Random Forest	0.4306728034711415	Random Forest	0.9762329530848526	KNN	1.47
Particle Swarm Optimization	Random Forest	0.4629369955645382	Random Forest	0.9578439819849844	KNN	0.37
Genetic Algorithm	Random Forest	0.3953852377558048	Random Forest	0.9639964262077172	KNN	0.7
TPOT	Random Forest	0.0618019104265741	Random Forest	0.9835389018576524	KNN	1.2

Overall Best Algorithm and Procedure:

Procedure	MSE Winner	MSE Value	R <sup>2</sup> Winner	R <sup>2</sup> Value	Time Winner	Time Elapsed (s)
Sequential Model-Based Optimization (skopt)	Random Forest	0.3763864620623288	Random Forest	0.9902956570670632	KNN	0.85