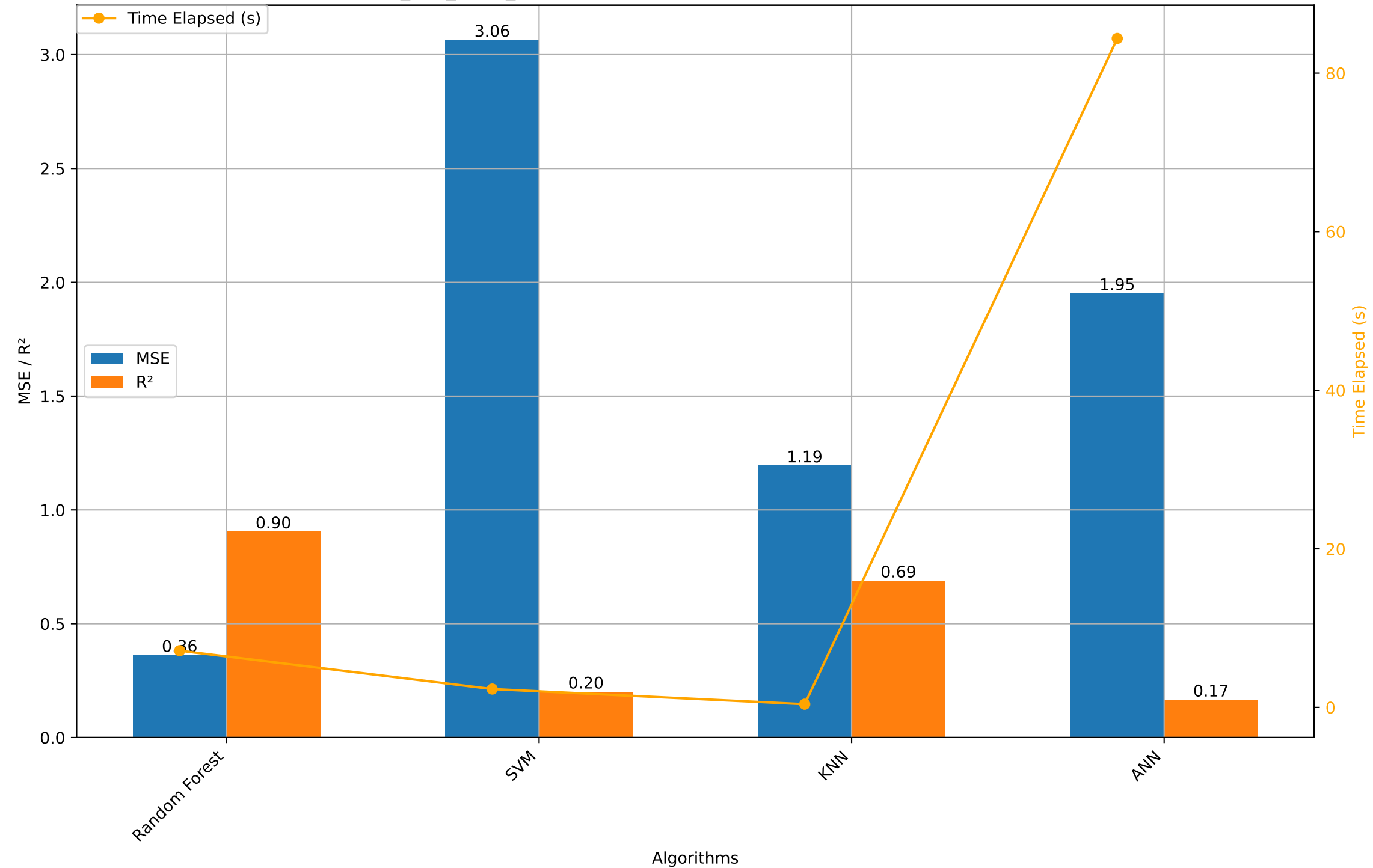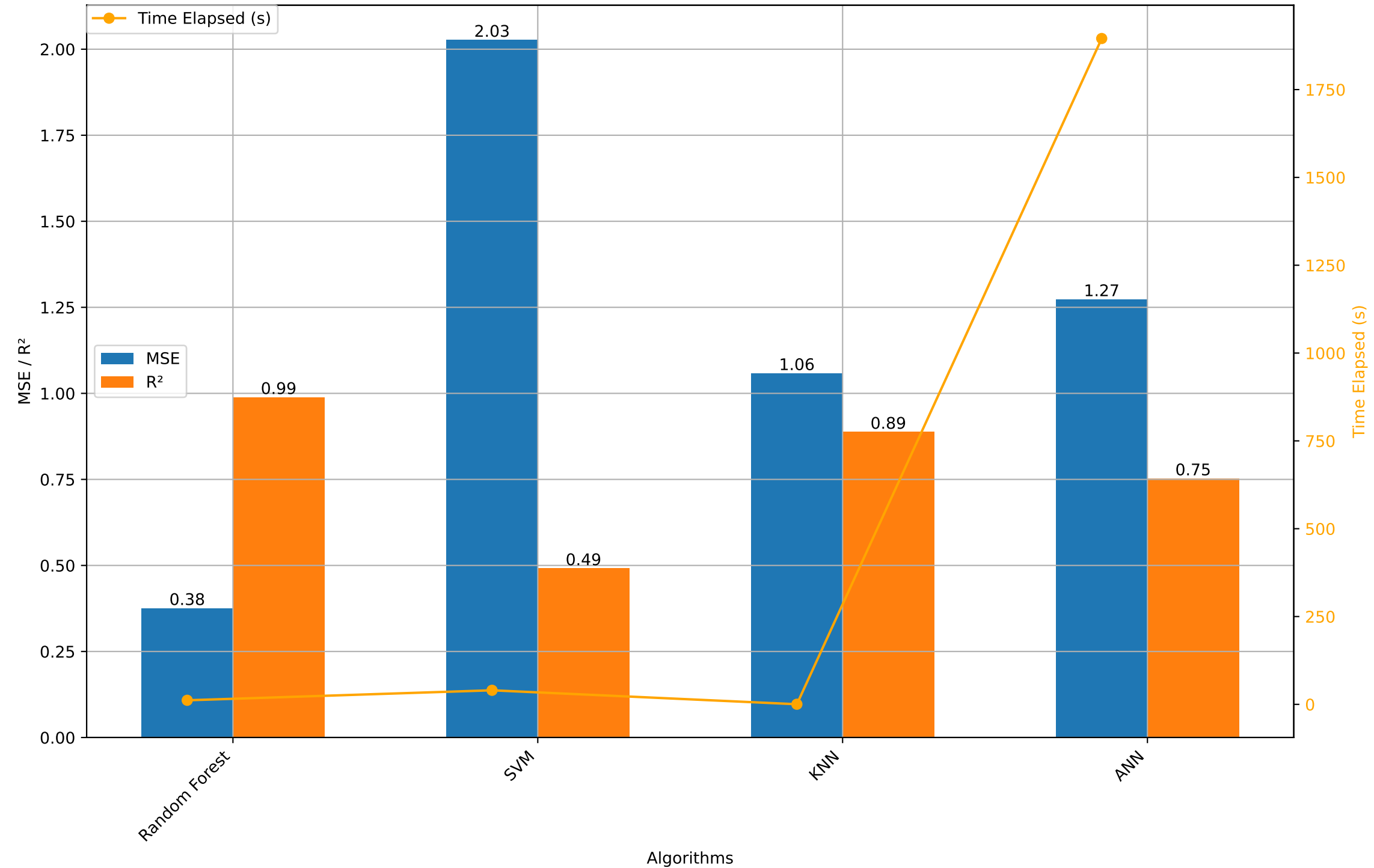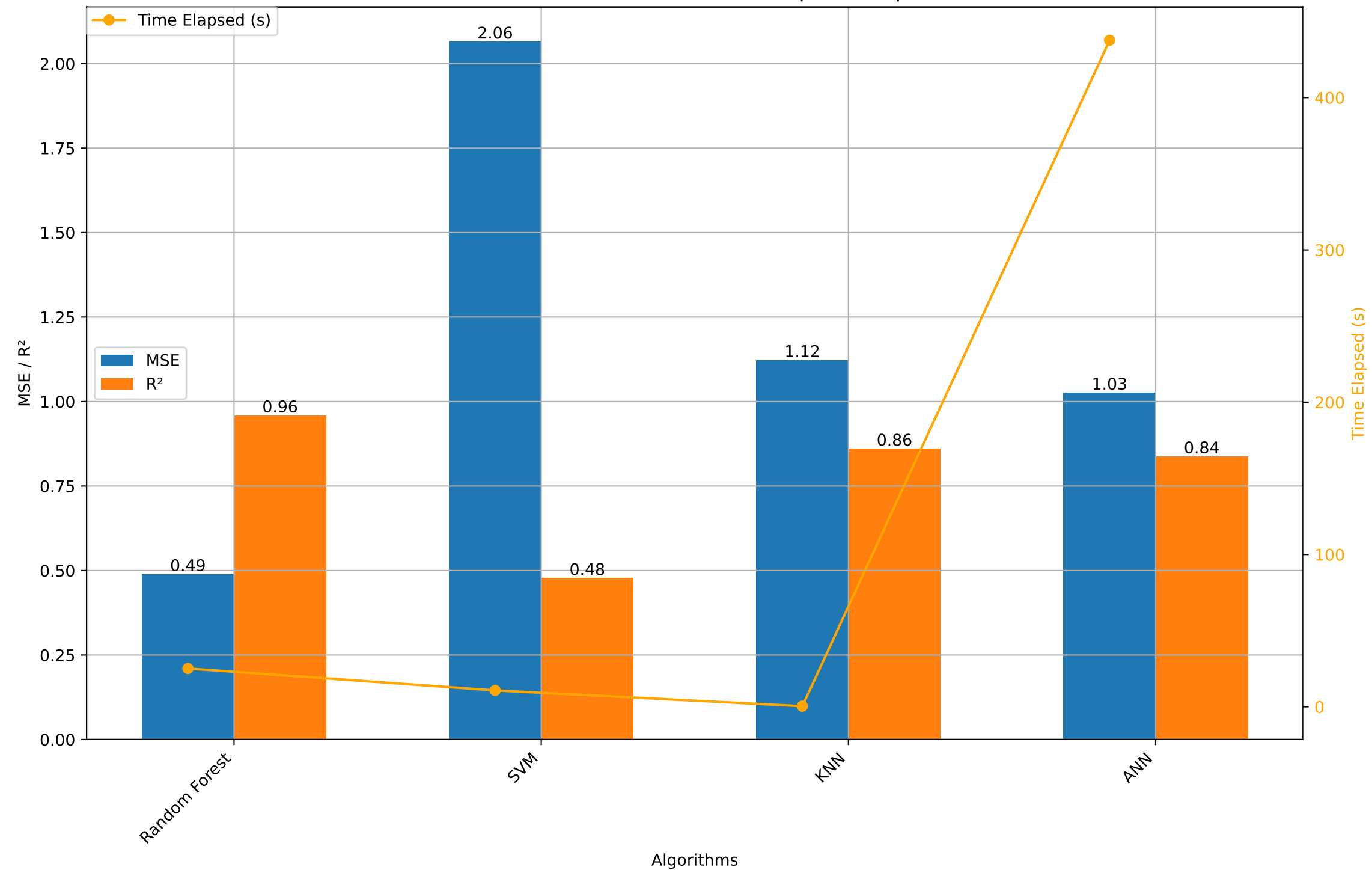3_fold_cross_validation - MSE, R² and Time Elapsed Comparison
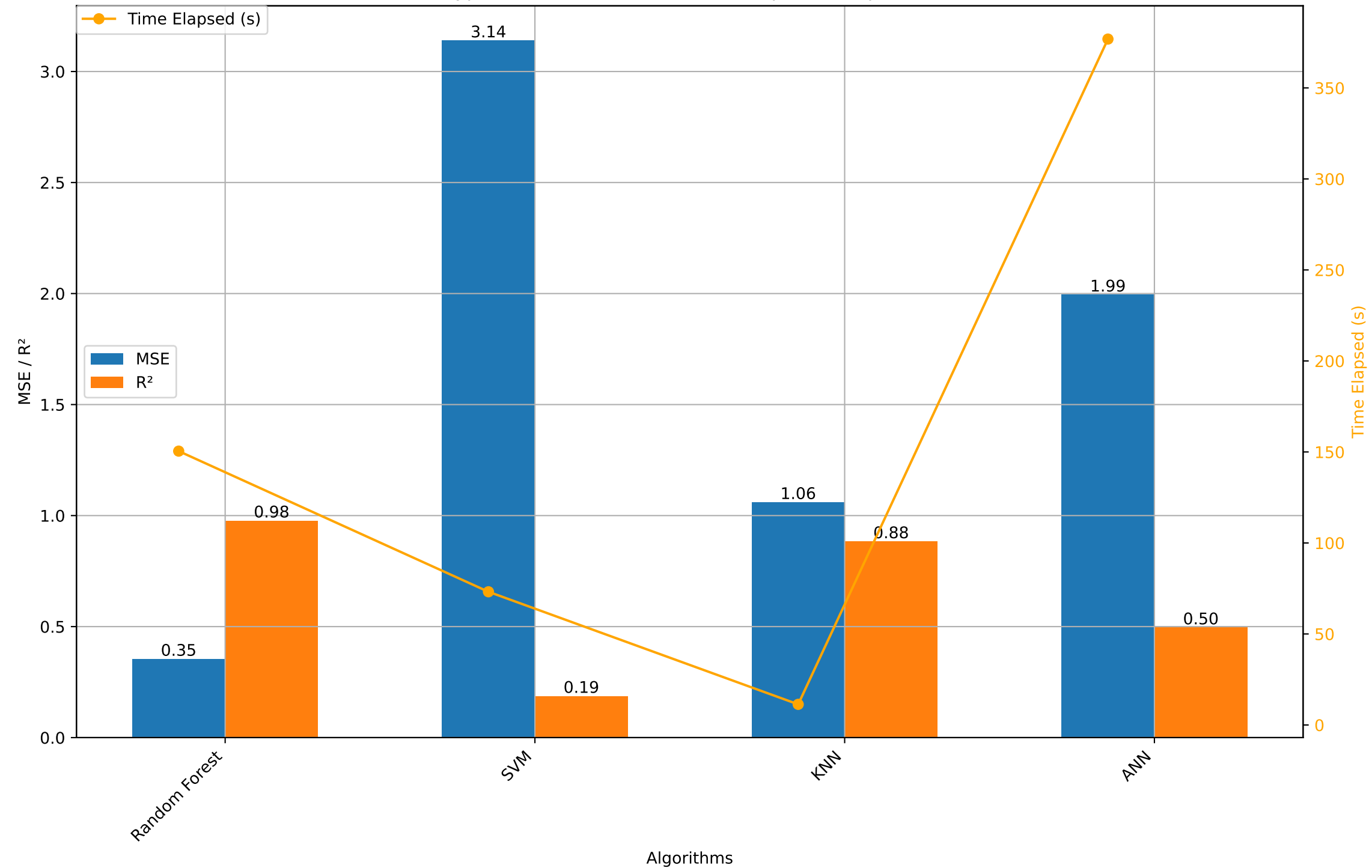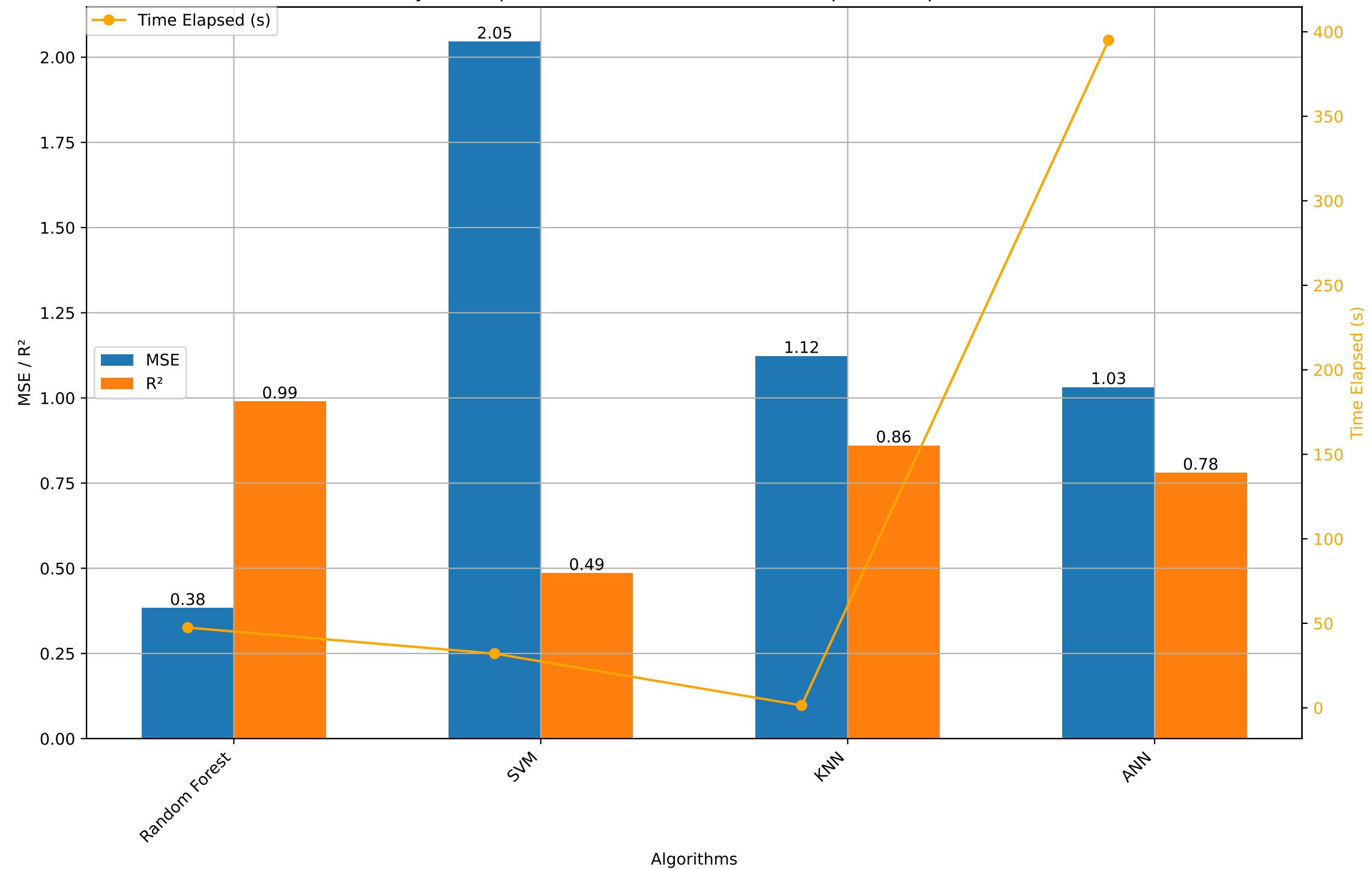
Grid Search - MSE, R² and Time Elapsed Comparison

Random Search - MSE, R² and Time Elapsed Comparison

Hyperband - MSE, R² and Time Elapsed Comparison
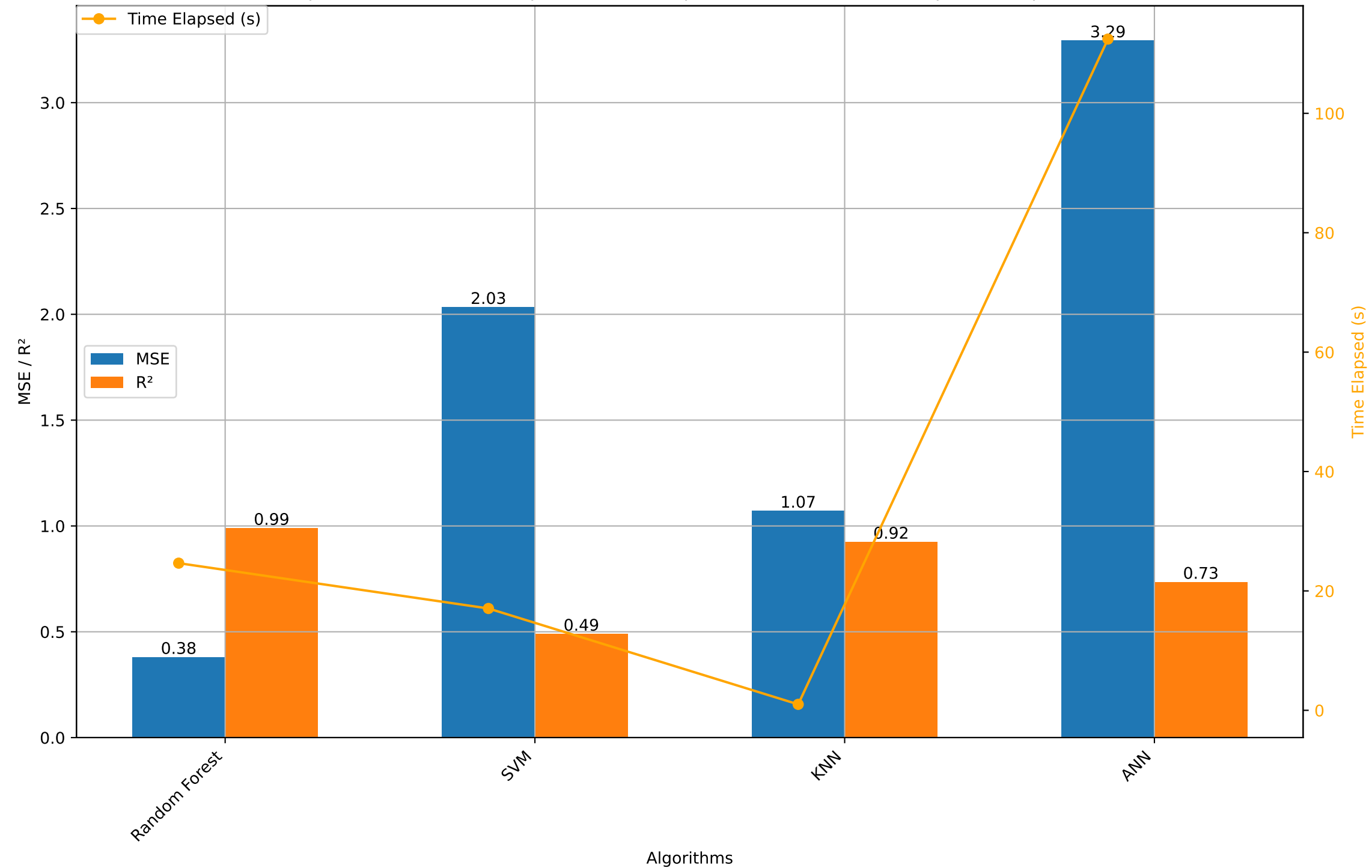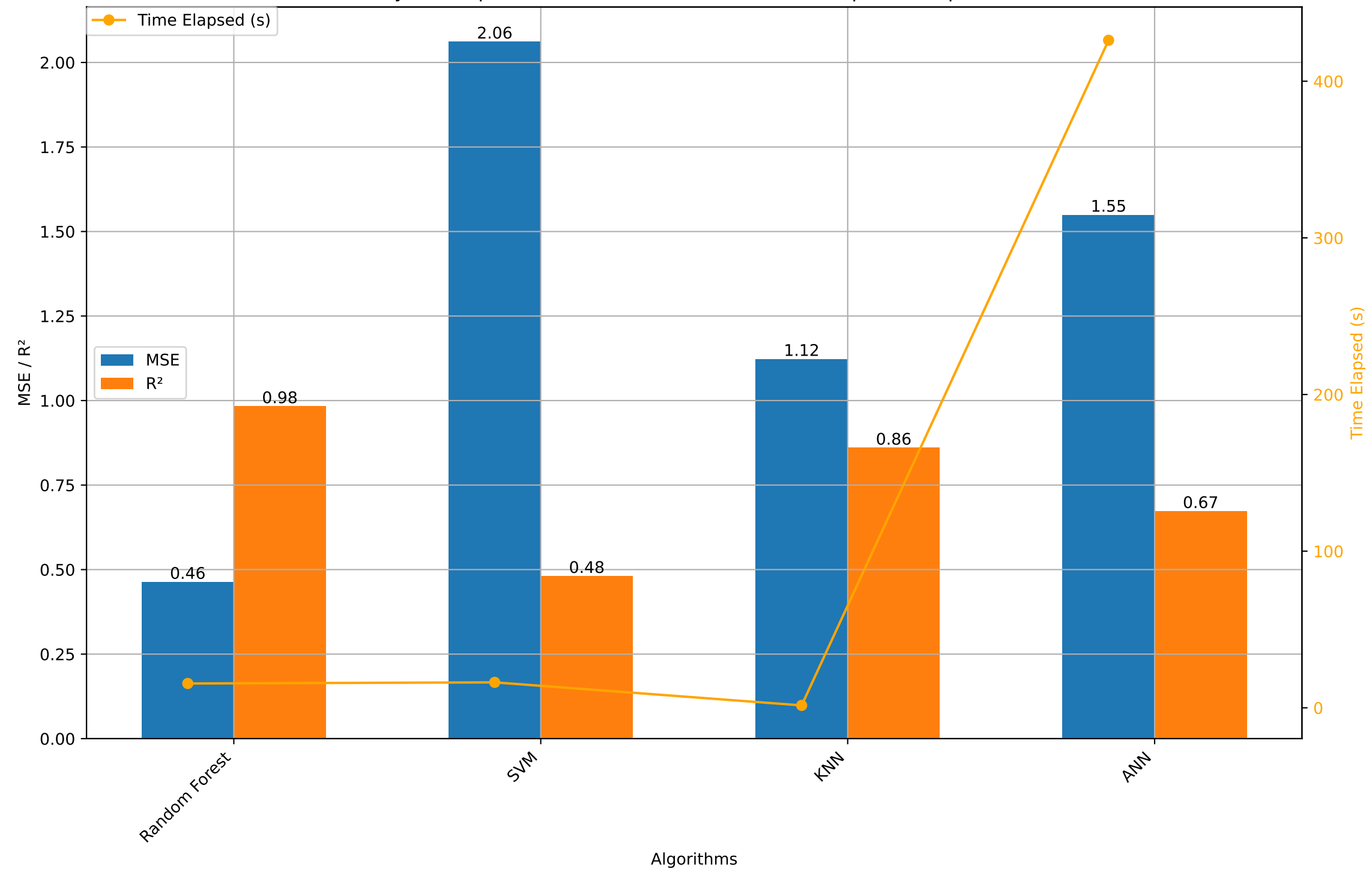
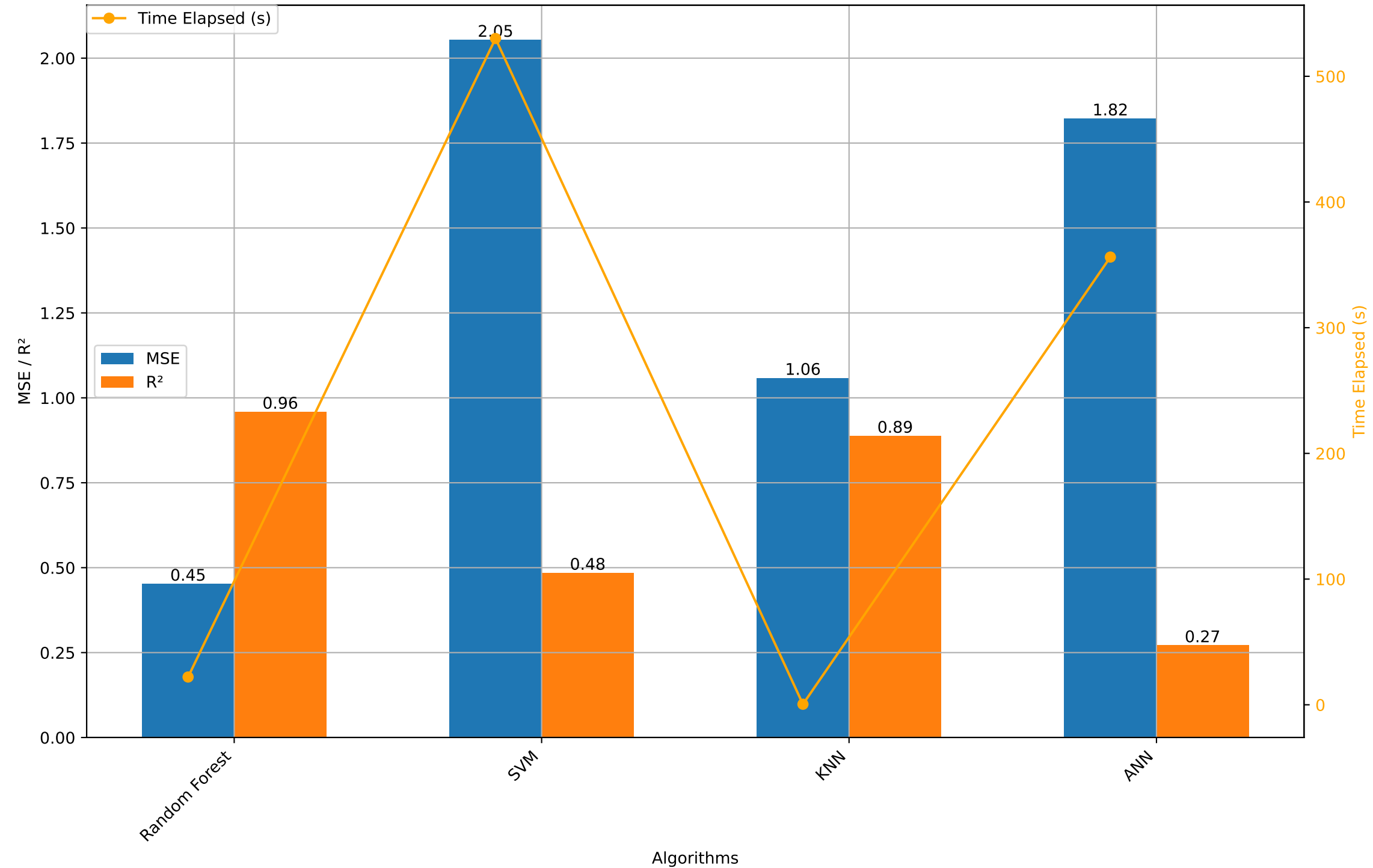Bayesian Optimization - MSE, R² and Time Elapsed Comparison

Sequential Model-Based Optimization (skopt) - MSE, R² and Time Elapsed Comparison
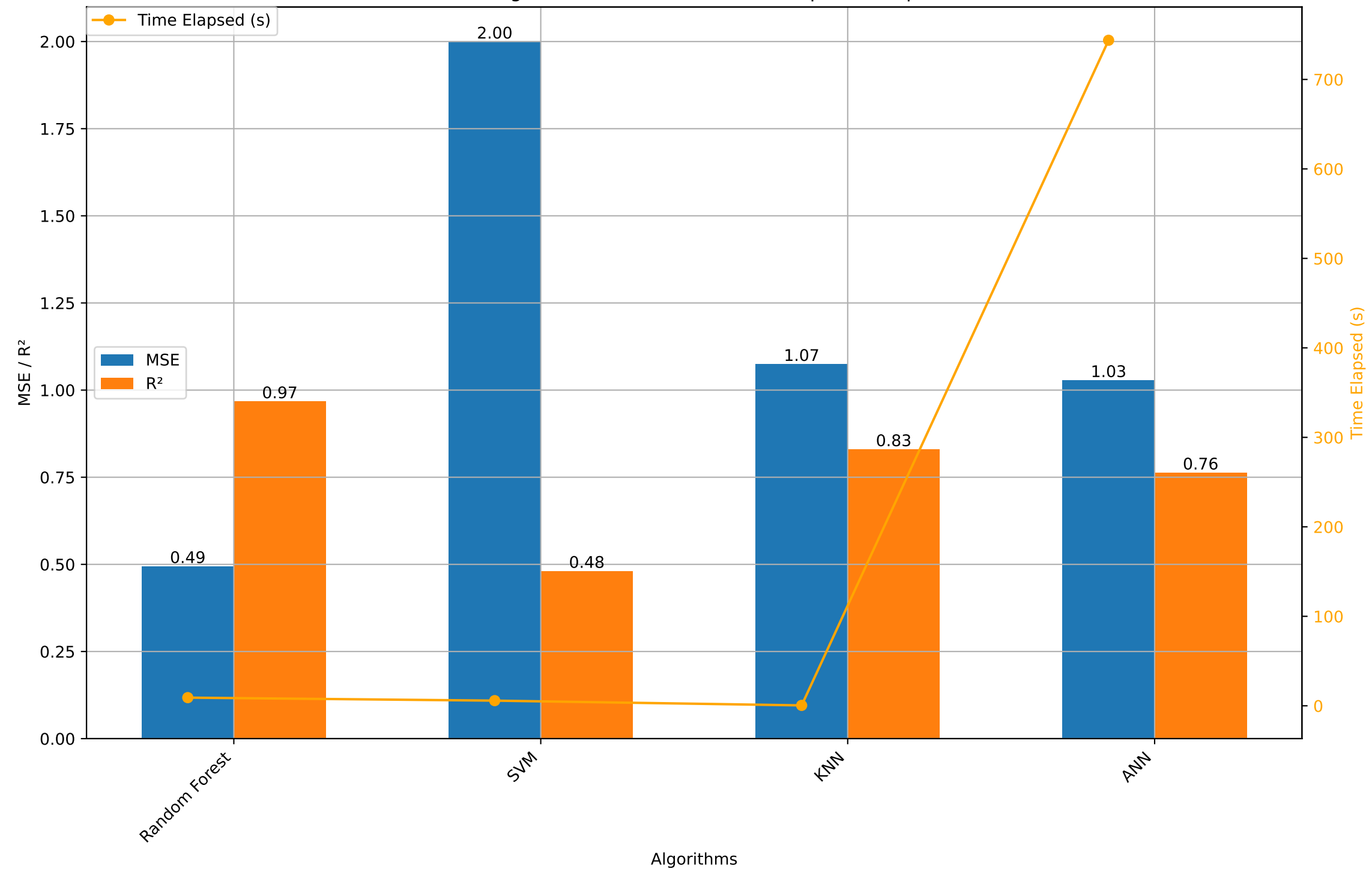
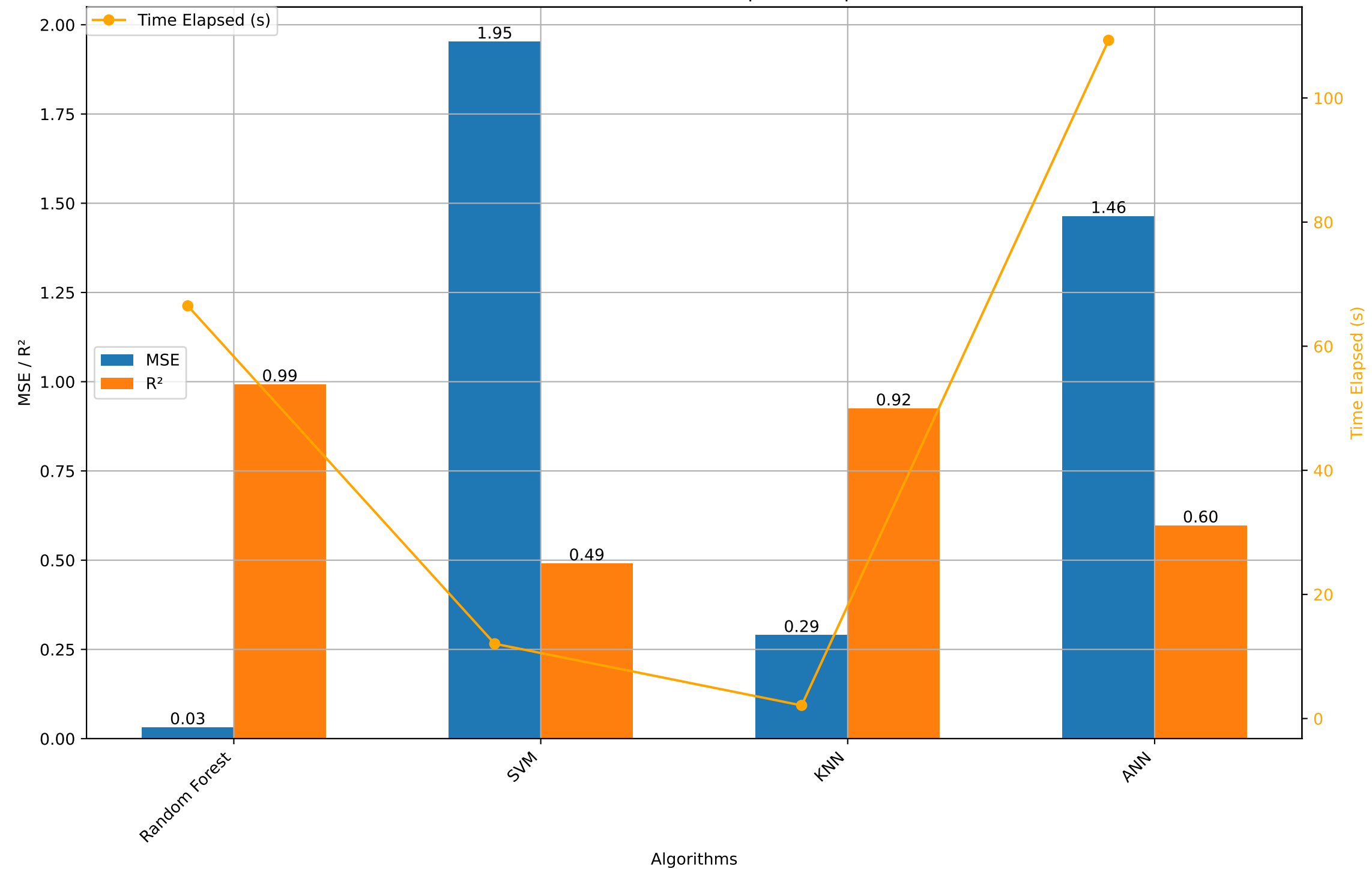Bayesian Optimization TPE - MSE, R² and Time Elapsed Comparison

Particle Swarm Optimization - MSE, R² and Time Elapsed Comparison

Genetic Algorithm - MSE, R² and Time Elapsed Comparison

TPOT - MSE, R² 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	0.3616741804908669	Random Forest	0.90440101315367	KNN	0.4
Grid Search	Random Forest	0.3754175877476004	Random Forest	0.9884995014429842	KNN	0.36
Random Search	Random Forest	0.4887102834293201	Random Forest	0.9582193267925088	KNN	0.39
Hyperband	Random Forest	0.3536295265320512	Random Forest	0.9766491856115636	KNN	11.33
Bayesian Optimization	Random Forest	0.3826008555670557	Random Forest	0.9889780919225426	KNN	1.45
Sequential Model-Based Optimization (skopt)	Random Forest	0.3798193977248769	Random Forest	0.9894961587707533	KNN	1.0
Bayesian Optimization TPE	Random Forest	0.4629406343267309	Random Forest	0.9824689810363406	KNN	1.54
Particle Swarm Optimization	Random Forest	0.4519810705571643	Random Forest	0.958343713849528	KNN	0.44
Genetic Algorithm	Random Forest	0.4942466140825068	Random Forest	0.9670925572649802	KNN	0.46
TPOT	Random Forest	0.031062334331495	Random Forest	0.9918879677685808	KNN	2.12

Overall Best Algorithm and Procedure:

Procedure	MSE Winner	MSE Value	R² Winner	R² Value	Time Winner	Time Elapsed (s)
TPOT	Random Forest	0.031062334331495	Random Forest	0.9918879677685808	KNN	2.12