10 selected publications (somewhat recent)

1. Huang, C., and Duraisamy, K., "Predictive Reduced Order Modeling of Chaotic Multi-scale Problems using Adaptively-Sampled Projections," Journal of Computational Physics, 2023.

2. Srivastava, V., and Duraisamy, L., "Generalizable Physics-constrained Modeling using Learning and Inference assisted by Feature Space Engineering," Physical Review Fluids, 2021.

3. Duraisamy, K. "Perspectives on Machine Learning-augmented Reynolds-averaged and Large Eddy Simulation Models of Turbulence," Physical Review Fluids, 2021.

4. Huang, C., Wentland, C., Duraisamy, K., and Merkle. C., "Model Reduction for Multi-scale Transport Problems using Structure-Preserving Least Squares Projections with Variable Transformation,", Journal of Computational Physics, 2021.

5. Pan, S., and Duraisamy, K., ``Physics-Informed Probabilistic Learning of Linear Embeddings of Non-linear Dynamics with Guaranteed Stability,'' SIAM Journal on Applied Dynamical Systems, 2020.

6. Pan, S., and Duraisamy, K., "On the Structure of Time-delay Embedding in Linear Models of Non-linear Dynamical Systems," Chaos, 2020.

7. Gouasmi, A., Duraisamy, K., and Murman, S., ``Formulation of Entropy Stable Schemes for the Compressible Multicomponent Euler Equations,'', Computer Methods in Applied Mechanics & Engineering, 2020.

8. Parish, E., and Duraisamy, K., "A Dynamic Sub-grid Scale Model for Large Eddy Simulations based on the Mori-Zwanzig formalism," Journal of Computational Physics, 2017.

9. Singh, A., Medida, S., and Duraisamy, K., "Machine Learning-augmented Predictive Modeling of Turbulent Separated Flows over Airfoils," AIAA Journal, 2017.

10. Parish, E., and Duraisamy, K., "A Paradigm for Data-driven Predictive Modeling Using Field Inversion and Machine Learning," Journal of Computational Physics, Vol. 305, 2016.