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Managing the computational cost of model selection and cross-validation in Extreme Learning Machines via Cholesky, SVD, QR and Eigen decompositions

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Highlights

- Managing the computational cost of Extreme Learning Machine model selection and cross-validation
- Comparing Singular Value Decomposition (SVD), Eigenvalue Decomposition (EVD), Cholesky decomposition and QR decomposition.
- Demonstrates theoretically and experimentally that matrix decompositions and cross-validation strategies play equally important roles in saving computational time.
- Presents a fast and scalable 10-fold Cross-Validation version with Eigenvalue Decomposition

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