

Resource Summary Report

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Classification And Regression Training

RRID:SCR_022524

Type: Tool

Proper Citation

Classification And Regression Training (RRID:SCR_022524)

Resource Information

URL: <https://github.com/topepo/caret>

Proper Citation: Classification And Regression Training (RRID:SCR_022524)

Description: Software R package that contains functions for training and plotting classification and regression models. Includes methods for pre-processing training data, calculating variable importance, and model visualizations.

Abbreviations: caret

Synonyms: Classification And REgression Training

Resource Type: software toolkit, software resource

Defining Citation: [DOI:10.18637/jss.v028.i05](https://doi.org/10.18637/jss.v028.i05)

Keywords: training and plotting classification and regression models, pre-processing training data, calculating variable importance, model visualizations.

Availability: Free, Available for download, Freely available

Resource Name: Classification And Regression Training

Resource ID: SCR_022524

Alternate URLs: <https://cran.r-project.org/web/packages/caret/>

License: GPL v3

Record Creation Time: 20220628T050153+0000

Record Last Update: 20260803T040831+0000

Ratings and Alerts

No rating or validation information has been found for Classification And Regression Training.

No alerts have been found for Classification And Regression Training.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 35 mentions in open access literature.

Listed below are recent publications. The full list is available at [ASWG](#) .

Olweny G, et al. (2025) Protocol for identifying Mycobacterium tuberculosis infection status through airway microbiome profiling. STAR protocols, 6(1), 103574.

Elias R, et al. (2025) Clear-Cell Renal Cell Carcinoma Molecular Subtypes Differ by African and European Genetic Similarity. Cancer research communications, 5(5), 743.

Duan H, et al. (2025) FAR1 as a ferroptosis-related biomarker and potential therapeutic target in acute kidney injury: integrated bioinformatics and experimental validation. Renal failure, 47(1), 2547260.

Zhou J, et al. (2025) Construction of enhanced MRI-based radiomics models using machine learning algorithms for non-invasive prediction of IL7R expression in high-grade gliomas and its prognostic value in clinical practice. Journal of translational medicine, 23(1), 383.

Yuan S, et al. (2025) Cross-population GWAS and proteomics improve risk prediction and reveal mechanisms in atrial fibrillation. Nature communications, 16(1), 6426.

Huang L, et al. (2025) Development and validation of a machine learning-based prediction model for intraoperative hypothermia in Chinese patients undergoing gastrointestinal surgery. Perioperative medicine (London, England), 14(1), 99.

Li J, et al. (2025) Transcriptomics-based identification of lysine crotonylation-related biomarkers in pre-eclampsia. BMC pregnancy and childbirth, 25(1), 1001.

Mörseburg A, et al. (2025) Genetic determinants of proteomic aging. npj aging, 11(1), 30.

Li H, et al. (2025) Interpretable Machine Learning for Predicting Anterior Uveitis in Axial Spondyloarthritis. Journal of clinical rheumatology : practical reports on rheumatic & musculoskeletal diseases, 31(5), e42.

Liu Q, et al. (2025) Restoration of intestinal secondary bile acid synthesis: A potential approach to improve pancreatic β cell function in type 1 diabetes. Cell reports. Medicine, 6(5), 102130.

Gemünd I, et al. (2025) Characterization of human CMV-specific CD8+ T cells using multi-layer single-cell omics. *Cell reports methods*, 5(7), 101085.

Yang H, et al. (2024) A simplified and robust risk stratification model for stem cell transplantation in pediatric acute myeloid leukemia. *Cell reports. Medicine*, 5(10), 101762.

Liu HF, et al. (2024) A novel combined nomogram for predicting severe acute lower respiratory tract infection in children hospitalized for RSV infection during the post-COVID-19 period. *Frontiers in immunology*, 15, 1437834.

Golov AK, et al. (2024) A genome-wide nucleosome-resolution map of promoter-centered interactions in human cells corroborates the enhancer-promoter looping model. *eLife*, 12.

Chen Y, et al. (2024) Identification of Diagnostic Biomarkers for Compensatory Liver Cirrhosis Based on Gut Microbiota and Urine Metabolomics Analyses. *Molecular biotechnology*, 66(11), 3164.

Zhan X, et al. (2024) Pyroptosis-related long-noncoding RNA signature predicting survival and immunotherapy efficacy in patients with lung squamous cell carcinoma. *Clinical and experimental medicine*, 24(1), 145.

Kim H, et al. (2024) Differentiating Uterine Sarcoma From Atypical Leiomyoma on Preoperative Magnetic Resonance Imaging Using Logistic Regression Classifier: Added Value of Diffusion-Weighted Imaging-Based Quantitative Parameters. *Korean journal of radiology*, 25(1), 43.

Li J, et al. (2024) Predictive value of machine learning model based on CT values for urinary tract infection stones. *iScience*, 27(12), 110843.

Kobelyatskaya AA, et al. (2024) EchoAGE: Echocardiography-based Neural Network Model Forecasting Heart Biological Age. *Aging and disease*, 16(4), 2383.

Qiu C, et al. (2024) Developing and comparing deep learning and machine learning algorithms for osteoporosis risk prediction. *Frontiers in artificial intelligence*, 7, 1355287.