

Resource Summary Report

Generated by PRECISE-TBI on Sep 9, 2026

CORAL

RRID:SCR_022711

Type: Tool

Proper Citation

CORAL (RRID:SCR_022711)

Resource Information

URL: <https://github.com/jmchandonia/CORAL>

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Description: Software tool as framework for rigorous self validated data modeling and integrative, reproducible data analysis.

Abbreviations: CORAL

Synonyms: Contextual Ontology based Repository Analysis Library

Resource Type: data analysis software, data processing software, software application, software resource

Keywords: FAIR data, Contexton, Microtype, Data Management, Provenance, Data Analysis, Jupyter

Funding: US Department of Energy

Availability: Free, Available for download, Freely available

Resource Name: CORAL

Resource ID: SCR_022711

License: AGPL

Record Creation Time: 20220830T050156+0000

Record Last Update: 20260905T133016+0000

Ratings and Alerts

No rating or validation information has been found for CORAL.

No alerts have been found for CORAL.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We found 95 mentions in open access literature.

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

Toropova AP, et al. (2026) QSAR Models for Repeated Dose Toxicity in Rats Using the CORAL Software. *Toxics*, 14(4).

Tranchellini F, et al. (2026) Evaluating deep learning sepsis prediction models in ICUs under distribution shift: a multi-centre retrospective cohort study. *NPJ digital medicine*, 9(1).

Latifi N, et al. (2026) SMILES-based QSAR analysis of carbamate derivatives targeting butyrylcholinesterase. *Scientific reports*, 16(1), 3910.

Chakraborty I, et al. (2026) PARQ: A Complexity-Consensus Aware Automatic Assessment of Motor Disease Severity in Parkinson's Disease. *Research square*.

Zheng BW, et al. (2026) Decoding the ERS-CAF immunoregulatory axis via multimodal AI and its pan-cancer prognostic and therapeutic predictive value. *NPJ digital medicine*, 9(1).

Barmppa K, et al. (2026) Parkinson's Disease Patient-Specific Striatum Organoids Show Hallmarks of Increased Inflammation. *Movement disorders : official journal of the Movement Disorder Society*, 41(4), 948.

Xu F, et al. (2026) Multimodular flavobacterial enzymes specialized in coordinated decomposition of cellulose and alginate in brown algal cell walls. *The ISME journal*, 20(1).

Ahmed SG, et al. (2026) Transfer learning for EEG-based BCIs: a comparative evaluation and optimization of data alignment methods. *Frontiers in systems neuroscience*, 20, 1840121.

Huang Y, et al. (2026) Clinically integrated multi-modal transformer framework with cross-modal gated fusion and clinical nomogram for automated Kellgren-Lawrence grading of knee osteoarthritis on x-ray images. *BMC musculoskeletal disorders*, 27(1).

Chen T, et al. (2026) ImageNet pre-training and two-step transfer learning in chromosome image classification. *Scientific reports*, 16(1).

Shi Y, et al. (2026) Deep Unsupervised Domain Adaptation for Translating Cancer Dependency Maps From Cell Lines to Breast Cancer Tumor Genomics. *Genetic*

epidemiology, 50(5), e70044.

Lee WH, et al. (2026) Anatomical Atlas of Kinase Responsiveness to Weight Gain: Adipose Depot Reprogramming in Diet-Induced Adiposity. *Metabolites*, 16(5).

Montermoso S, et al. (2026) Structures of nucleotide-bound Redondovirus Rep protein link conformation and function. *PLoS pathogens*, 22(3), e1013997.

Sujan Kumar MV, et al. (2026) Optimizing charge discharge cycles using QPPONet-enabled hybrid learning framework for energy management and safety in electric vehicles. *Scientific reports*, 16(1).

Bates EA, et al. (2026) G α q Is a Heterotrimeric G-Protein Subunit That Directs the Selectivity of PPAR γ -Induced Gene Pathways Toward Energy-Related Processes Rather than Adiposity. *Metabolites*, 16(6).

Abulfaraj AW, et al. (2026) Cross-Center Vision-Language Transformer for Robust Mammography-Based Breast Cancer Diagnosis. *Bioengineering (Basel, Switzerland)*, 13(6).

Ma C, et al. (2025) Pre-training, personalization, and self-calibration: all a neural network-based myoelectric decoder needs. *Frontiers in neurorobotics*, 19, 1604453.

Ovaskainen O, et al. (2025) Common to rare transfer learning (CORAL) enables inference and prediction for a quarter million rare Malagasy arthropods. *Nature methods*, 22(10), 2074.

Toropova AP, et al. (2025) Using the Coefficient of Conformism of a Correlative Prediction in Simulation of Cardiotoxicity. *Toxics*, 13(4).

Koning HJ, et al. (2025) Structural plasticity of the coiled-coil interactions in human SFPQ. *Nucleic acids research*, 53(2).