

Resource Summary Report

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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: 20260821T194239+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 [NIF](#) .

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).

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

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).

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

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.

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

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