# **Resource Summary Report**

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# **PRoNTo**

RRID:SCR\_006908 Type: Tool

**Proper Citation** 

PRoNTo (RRID:SCR\_006908)

#### **Resource Information**

URL: http://www.mlnl.cs.ucl.ac.uk/pronto/

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**Description:** A software toolbox based on pattern recognition techniques for the analysis of neuroimaging data. Statistical pattern recognition is a field within the area of machine learning which is concerned with automatic discovery of regularities in data through the use of computer algorithms, and with the use of these regularities to take actions such as classifying the data into different categories. In PRoNTo, brain scans are treated as spatial patterns and statistical learning models are used to identify statistical properties of the data that can be used to discriminate between experimental conditions or groups of subjects (classification models) or to predict a continuous measure (regression models).

Abbreviations: PRoNTo

**Synonyms:** PRoNTo (Pattern Recognition for Neuroimaging Toolbox), Pattern Recognition for Neuroimaging Toolbox, PRoNTo - Pattern Recognition for Neuroimaging Tool

**Resource Type:** data processing software, software application, software toolkit, software resource, data analytics software, image analysis software

**Keywords:** reusable library, clinical neuroinformatics, matlab, magnetic resonance, nifti, os independent, pet, spect, neuroimaging, pattern recognition

Funding:

Availability: GNU General Public License

Resource Name: PRoNTo

Resource ID: SCR\_006908

Alternate IDs: nlx\_155916

Alternate URLs: http://www.nitrc.org/projects/pronto

**Record Creation Time:** 20220129T080238+0000

Record Last Update: 20250523T054602+0000

## **Ratings and Alerts**

No rating or validation information has been found for PRoNTo.

No alerts have been found for PRoNTo.

### Data and Source Information

Source: SciCrunch Registry

#### **Usage and Citation Metrics**

We found 186 mentions in open access literature.

Listed below are recent publications. The full list is available at <u>NIF</u>.

Wards Y, et al. (2024) Stimulating prefrontal cortex facilitates training transfer by increasing representational overlap. Cerebral cortex (New York, N.Y. : 1991), 34(5).

Zhong YL, et al. (2024) Aberrant Neurovascular Coupling in Diabetic Retinopathy Using Arterial Spin Labeling (ASL) and Functional Magnetic Resonance Imaging (fMRI) methods. Diabetes, metabolic syndrome and obesity : targets and therapy, 17, 2809.

Albrecht F, et al. (2024) Structural parameters are superior to eigenvector centrality in detecting progressive supranuclear palsy with machine learning & multimodal MRI. Heliyon, 10(15), e34910.

Nehls S, et al. (2024) Time-sensitive changes in the maternal brain and their influence on mother-child attachment. Translational psychiatry, 14(1), 84.

Strzalka-Mrozik B, et al. (2024) Ranibizumab Modifies the Expression of Metalloproteinases and Their Tissue Inhibitors in Peripheral Blood Mononuclear Cells in Patients with Exudative Age-Related Macular Degeneration. Journal of clinical medicine, 13(1).

Tang QY, et al. (2024) Machine Learning Analysis Classifies Patients with Primary Angle-Closure Glaucoma Using Abnormal Brain White Matter Function. Clinical ophthalmology (Auckland, N.Z.), 18, 659.

Guo ZP, et al. (2024) The differential orbitofrontal activity and connectivity between atypical and typical major depressive disorder. NeuroImage. Clinical, 45, 103717.

Shtaya AA, et al. (2024) The genetic landscape of Lynch syndrome in the Israeli population. Familial cancer, 24(1), 6.

Cheong Y, et al. (2024) Effects of functional polymorphisms of opioid receptor mu 1 and catechol-O-methyltransferase on the neural processing of pain. Psychiatry and clinical neurosciences, 78(5), 300.

Tassi E, et al. (2024) Assessment of ComBat Harmonization Performance on Structural Magnetic Resonance Imaging Measurements. Human brain mapping, 45(18), e70085.

Rosner G, et al. (2024) Surveillance Outcome and Genetic Findings in Individuals at High Risk of Pancreatic Cancer. Clinical and translational gastroenterology, 15(2), e00668.

Mulholland MM, et al. (2024) Long term impacts of early social environment on chimpanzee white matter. Scientific reports, 14(1), 29879.

Tong Y, et al. (2024) Impaired interhemispheric synchrony in patients with iridocyclitis and classification using machine learning: an fMRI study. Frontiers in immunology, 15, 1474988.

Choi KS, et al. (2023) Progressive reduction in basal ganglia explains and predicts cerebral structural alteration in type 2 diabetes. Journal of cerebral blood flow and metabolism : official journal of the International Society of Cerebral Blood Flow and Metabolism, 43(12), 2096.

Miller L, et al. (2023) Simulation and team training to improve preterm birth knowledge, evidence-based practices, and communication skills in midwives in Kenya and Uganda: Findings from a pre- and post-intervention analysis. PLOS global public health, 3(6), e0001695.

Buga A, et al. (2023) Metabolic and ruck performance effects of a novel, light-weight, energydense ketogenic bar. Experimental physiology, 108(5), 715.

Kim M, et al. (2023) Multivariate prediction of long COVID headache in adolescents using gray matter structural MRI features. Frontiers in human neuroscience, 17, 1202103.

Langerbeck M, et al. (2023) Borderline shades: Morphometric features predict borderline personality traits but not histrionic traits. NeuroImage. Clinical, 40, 103530.

Afulani PA, et al. (2023) Caring for providers to improve patient experience (CPIPE): intervention development process. Global health action, 16(1), 2147289.

Yin F, et al. (2023) Multimodal Investigation of Deep Gray Matter Nucleus in Patients with Multiple Sclerosis and Their Clinical Correlations: A Multivariate Pattern Analysis Study. Journal of personalized medicine, 13(10).