Search strategy using Medline (restricted to Core Clinical Journals)

1) machine learning,
2) supervised learning
3) unsupervised learning
4) deep learning
5) artificial Intelligence
6) decision trees
7) Artificial
8) Neural Network
9) CNN
10) ANN
11) Convolutional Neural Network
12) random forest,
13) reinforcement learning
14) gradient boosting
15) computer aided diagnosis
16) CAD
17) computer assisted diagnosis
18) computational analysis

19) OR/ 1-18

20) Diagnosis

21) 19 AND 20

List of eligible studies

Author	Journal	Specialty	Title
Asaoka et al., 2017	American journal of ophthalmology	Ophthalmology	Validating the usefulness of the "random forests" classifier to diagnose early glaucoma with optical coherence tomography.
Bahl et al., 2017	Radiology	Oncology	High-risk breast lesions: a machine learning model to predict pathologic upgrade and reduce unnecessary surgical excision.
Becker et al., 2018	The British journal of radiology	Oncology	Classification of breast cancer in ultrasound imaging using a generic deep learning analysis software: a pilot study.
Bejnordi et al., 2017	JAMA	Oncology	Diagnostic assessment of deep learning algorithms for detection of lymph node metastases in women with breast cancer.
Chen et al., 2018	Gastroenterology	Gastroenterology	Accurate classification of diminutive colorectal polyps using computer-aided analysis.
Demertzi et al., 2015	Brain	Neurology	Intrinsic functional connectivity differentiates minimally conscious from unresponsive patients.
Dinh et al., 2018	Radiology	Oncology	Characterization of prostate cancer with Gleason score of at least 7 by using quantitative multiparametric MR imaging: validation of a computer-aided diagnosis system in patients referred for prostate biopsy.
Eshagi et al., 2016	Neurology	Neurology	Gray matter MRI differentiates neuromyelitis optica from multiple sclerosis using random forest.
Gallego-Ortiz et al., 2015	Radiology	Oncology	Improving the accuracy of computer-aided diagnosis for breast MR imaging by differentiating between mass and nonmass lesions.
Hao et al., 2016	The Journal of pediatrics	Immunology	A classification tool for differentiation of Kawasaki disease from other febrile illnesses.
Harper et al., 2016	Brain	Neurology	MRI visual rating scales in the diagnosis of dementia: evaluation in 184 post-mortem confirmed cases.
Hornbrook et al., 2017	Digestive diseases and sciences	Oncology	Early colorectal cancer detected by machine learning model using gender, age, and complete blood count data.
Huang et al., 2017	Radiology	Oncology	Added value of computer-aided CT image features for early lung cancer diagnosis with small pulmonary nodules: a matched case-control study.
Keller et al., 2016	Journal of Allergy and Clinical Immunology	Immunology	Mutation in IRF2BP2 is responsible for a familial form of common variable immunodeficiency disorder.
Lee et al., 2015	American Journal of Roentgenology	Oncology	Does computer-aided diagnosis permit differentiation of angiomyolipoma without visible fat from renal cell carcinoma on MDCT?
Li et al., 2017	American Journal of Roentgenology	Oncology	Computer-aided diagnosis of ground-glass opacity nodules using open-source software for quantifying tumor heterogeneity.

Lu et al., 2016	Medicine	Psychiatry	Discriminative analysis of schizophrenia using support vector machine and recursive feature elimination on structural MRI images.
Moller et al., 2015	Radiology	Neurology	Alzheimer disease and behavioral variant frontotemporal dementia: automatic classification based on cortical atrophy for single-subject diagnosis.
Narula et al., 2016	Cardiology	Cardiology	Machine-learning algorithms to automate morphological and functional assessments in 2D echocardiography.
Ng et al., 2015	American journal of clinical pathology	Oncology	Computer-aided detection of rare tumor populations in flow cytometry: An example with classic Hodgkin lymphoma.
Silterra et al., 2016	The Journal of infectious diseases	Infectious diseases	Transcriptional categorization of the etiology of pneumonia syndrome in pediatric patients in malaria-endemic areas.
Somnay et al., 2017	Surgery	Endocrinology	Improving diagnostic recognition of primary hyperparathyroidism with machine learning
Sun et al., 2017	Radiology	Neurology	Psychoradiologic utility of MR imaging for diagnosis of attention deficit hyperactivity disorder: a radiomics analysis
Ta et al., 2017	Radiology	Hepatology	Focal Liver Lesions: Computer-aided Diagnosis by Using Contrast-enhanced US Cine Recording.
Ting et al., 2017	JAMA	Ophthalmology	Development and validation of a deep learning system for diabetic retinopathy and related eye diseases using retinal images from multiethnic populations with diabetes.
Tomlinson et al., 2016	Chest	Oncology	Transcriptional profiling of endobronchial ultrasound-guided lymph node samples aids diagnosis of mediastinal lymphadenopathy.
Yasaka et al., 2017a	Radiology	Oncology	Deep learning with convolutional neural network for differentiation of liver masses at dynamic contrast-enhanced CT: a preliminary study.
Yasaka et al., 2017b	Radiology	Oncology	Liver fibrosis: deep convolutional neural network for staging by using gadoxetic acid–enhanced hepatobiliary phase MR images.