evaluating learning algorithms a classification perspective

#evaluating learning algorithms #classification algorithms #machine learning evaluation #algorithm performance metrics #predictive model assessment

Explore the critical aspects of evaluating learning algorithms, specifically focusing on classification techniques. This guide offers insights into various performance metrics and perspectives to assess the effectiveness and reliability of predictive models in machine learning.

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Tutorial 34- Performance Metrics For Classification Problem In Machine Learning- Part1 - Tutorial 34- Performance Metrics For Classification Problem In Machine Learning- Part1 by Krish Naik 232,326 views 4 years ago 24 minutes - Connect with me here: Twitter: https://twitter.com/Krishnaik06 Facebook: https://www.facebook.com/krishnaik06 instagram: ...

Introduction

Classification Problem Statement

Binary Classification Problem

Recall and Precision

Recall

Top 6 Machine Learning Algorithms for Beginners | Classification - Top 6 Machine Learning Algorithms for Beginners | Classification by Visual Design Studio 4,307 views 1 year ago 7 minutes, 29 seconds - An introduction of top 6 machine **learning algorithms**, and how to build a machine learning model pipeline to address **classification**, ...

Machine Learning Algorithms

Logistic Regression

Decision Tree

Random Forest

Support Vector Machine

Model Pipeline

Confusion Matrix & Accuracy

How to evaluate ML models | Evaluation metrics for machine learning - How to evaluate ML models | Evaluation metrics for machine learning by AssemblyAl 33,864 views 2 years ago 10 minutes, 5 seconds - There are many **evaluation**, metrics to choose from when training a machine **learning**, model. Choosing the correct metric for your ...

Intro

AssemblyAl

Accuracy

Precision

Recall

F1 score

AUC (Area Under the Curve)

Crossentropy

MAE (Mean Absolute Error)

Root Mean Squared Error

R2 (Coefficient of Determination)

Cosine similarity

Machine Learning Algorithm-Which one to choose for your Problem? - Machine Learning Algorithm-Which one to choose for your Problem? by Krish Naik 194,705 views 4 years ago 21 minutes - Here is a video which helps you understand which machine **learning algorithm**, you should use for your use case. You can buy my ...

Classification and Regression in Machine Learning - Classification and Regression in Machine Learning by Quantopian 181,113 views 5 years ago 2 minutes, 48 seconds - In this short video, Max Margenot gives an overview of supervised and unsupervised machine **learning**, tools. He covers ... 13. Classification - 13. Classification by MIT OpenCourseWare 128,733 views 6 years ago 49 minutes - Prof. Guttag introduces supervised **learning**, with nearest neighbor **classification**, using feature scaling and decision trees. License: ...

Supervised Learning

Using Distance Matrix for Classification

Other Metrics

Repeated Random Subsampling

Class LogisticRegression

Building a Model

List Comprehension

Applying Model

Putting It Together

Compare to KNN Results

Looking at Feature Weights

Evaluating Machine Learning Models - Evaluating Machine Learning Models by ritvikmath 7,404 views 5 years ago 8 minutes, 7 seconds - Learning, to **evaluate**, machine **learning**, models.

Confusion Matrix

Accuracy Metric

Precision

F1 Score

Harvard CS50 (2023) – Full Computer Science University Course - Harvard CS50 (2023) – Full Computer Science University Course by freeCodeCamp.org 2,317,217 views 4 months ago 25 hours - Learn the basics of computer science from Harvard University. This is CS50, an introduction to the intellectual enterprises of ...

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Lecture 1 - C

Lecture 2 - Arrays

Lecture 3 - Algorithms

Lecture 4 - Memory

Lecture 5 - Data Structures

Lecture 6 - Python

Lecture 7 - SQL

Lecture 8 - HTML, CSS, JavaScript

Lecture 9 - Flask

Lecture 10 - Emoji

Cybersecurity

Al vs Machine Learning - Al vs Machine Learning by IBM Technology 775,175 views 10 months ago 5 minutes, 49 seconds - What is really the difference between Artificial intelligence (AI) and machine **learning**, (ML)? Are they actually the same thing?

Machine Learning with Python and Scikit-Learn – Full Course - Machine Learning with Python and Scikit-Learn – Full Course by freeCodeCamp.org 213,268 views 3 months ago 18 hours - This course is a practical and hands-on introduction to Machine **Learning**, with Python and Scikit-Learn for beginners with basic ...

Introduction

Lesson 1 - Linear Regression and Gradient Descent

Lesson 2 - Logistic Regression for Classification

Lesson 3 - Decision Trees and Random Forests

Lesson 4 - How to Approach Machine Learning Projects

Lesson 5 - Gradient Boosting Machines with XGBoost

Lesson 6 - Unsupervised Learning using Scikit-Learn

Lesson 7 - Machine Learning Project from Scratch

Lesson 8 - Deploying a Machine Learning Project with Flask

Machine Learning Course for Beginners - Machine Learning Course for Beginners by freeCode-Camp.org 1,585,945 views 2 years ago 9 hours, 52 minutes - Learn the theory and practical application of machine **learning**, concepts in this comprehensive course for beginners. **Learning**, ...

Course Introduction

Fundamentals of Machine Learning

Supervised Learning and Unsupervised Learning In Depth

Linear Regression

Logistic Regression

Project: House Price Predictor

Regularization

Support Vector Machines

Project: Stock Price Predictor

Principal Component Analysis

Learning Theory

Decision Trees

Ensemble Learning

Boosting, pt 1

Boosting, pt 2

Stacking Ensemble Learning

Unsupervised Learning, pt 1

Unsupervised Learning, pt 2

K-Means

Hierarchical Clustering

Project: Heart Failure Prediction Project: Spam/Ham Detector

Computer Scientist Explains Machine Learning in 5 Levels of Difficulty | WIRED - Computer Scientist Explains Machine Learning in 5 Levels of Difficulty | WIRED by WIRED 2,189,732 views 2 years ago 26 minutes - WIRED has challenged computer scientist and Hidden Door cofounder and CEO Hilary Mason to explain machine **learning**, to 5 ...

Computer Scientist Answers Computer Questions From Twitter - Computer Scientist Answers Computer Questions From Twitter by WIRED 1,605,909 views 6 months ago 14 minutes, 27 seconds

- Professor and computer scientist David J. Malan joins WIRED to answer your computer and programming questions from Twitter.

Introduction

How do search engines work so fast

Will computer programming jobs be taken over by Al

How do microchips work

What do computer scientists do

How do zeros and ones turn into the internet

Why do computers use binary coding

Why is every Windows solution restarted

Whats the best operating system

Why arent computers getting cheaper

What is cloud computing

How does computer memory work

What is Web 3

Firmware vs Software

Supervised vs. Unsupervised Learning - Supervised vs. Unsupervised Learning by IBM Technology 117,073 views 1 year ago 7 minutes, 8 seconds - What's the best type of machine **learning**, model for you - supervised or Unsupervised **learning**,? In this video, Martin Keen explains ...

Supervised Learning

Unsupervised Learning

Clustering

Semi Supervised Learning

What exactly is an algorithm? Algorithms explained | BBC Ideas - What exactly is an algorithm? Algorithms explained | BBC Ideas by BBC Ideas 378,367 views 4 years ago 7 minutes, 54 seconds - What is an **algorithm**,? You may be familiar with the idea in the context of Instagram, YouTube or Facebook, but it can feel like a big ...

Introduction

What is an algorithm

The Oxford Internet Institute

The University of Oxford

What are algorithms doing

How do algorithms work

Algorithms vs humans

Ethical considerations

Linear Regression in 2 minutes - Linear Regression in 2 minutes by Visually Explained 159,767 views 2 years ago 2 minutes, 34 seconds - Linear Regression in 2 minutes. ----- Credit: Manim and Python: https://github.com/3b1b/manim Blender3D: ...

Machine Learning vs Deep Learning - Machine Learning vs Deep Learning by IBM Technology 522,377 views 1 year ago 7 minutes, 50 seconds - Get a unique **perspective**, on what the difference is between Machine **Learning**, and Deep **Learning**, - explained and illustrated in a ...

Difference between Machine Learning and Deep Learning

Supervised Learning

Harvard Professor Explains Algorithms in 5 Levels of Difficulty | WIRED - Harvard Professor Explains Algorithms in 5 Levels of Difficulty | WIRED by WIRED 1,798,912 views 3 months ago 25 minutes - From the physical world to the virtual world, **algorithms**, are seemingly everywhere. David J. Malan, Professor of Computer Science ...

All Machine Learning Models Explained in 5 Minutes | Types of ML Models Basics - All Machine Learning Models Explained in 5 Minutes | Types of ML Models Basics by Learn with Whiteboard 1,104,528 views 3 years ago 5 minutes, 1 second - Confused about understanding machine **learning**, models? Well, this video will help you grab the basics of each one of them.

Introduction

Overview

Supervised Learning

Linear Regression

Decision Tree

Random Forest

Neural Network

Classification

Support Vector Machine

Classifier

Unsupervised Learning

Dimensionality Reduction

Evaluating Classification and Regression Machine Learning Models - Evaluating Classification and Regression Machine Learning Models by Spencer Pao 403 views 2 years ago 8 minutes, 49 seconds - Likes: 23 : Dislikes: 0 : 100.0% : Updated on 01-21-2023 11:57:17 EST ===== Interested in what Machine **Learning**, Metrics ...

Why do we care about Metrics?

Confusion Matrix

Sensitivity, Specificity, False Positive Rates

Area Under the Curve (AUC-ROC)

F1 Score

Why using Regression metrics differ from those of Classification

Mean Squared Error & Root Mean Squared Error

Mean Absolute Error

Types Of Machine Learning | Machine Learning Algorithms | Machine Learning Tutorial | Simplilearn - Types Of Machine Learning | Machine Learning Algorithms | Machine Learning Tutorial | Simplilearn by Simplilearn 222,504 views 3 years ago 21 minutes - Machine **Learning**, helps you build models that can make predictions and take decisions of their own. This video on Types of ...

Evaluating a Classifier - Evaluating a Classifier by Saptarsi Goswami 2,333 views 3 years ago 13 minutes, 34 seconds - Discuss the objectives of a machine **learning**, model and how a classifier is evaluated. What is problematic with **classification**, ...

Introduction

Model Objectives

Evaluating Classifier

Confusion Matrix

Precision

10 ML algorithms in 45 minutes | machine learning algorithms for data science | machine learning - 10 ML algorithms in 45 minutes | machine learning algorithms for data science | machine learning by Unfold Data Science 212,235 views 1 year ago 46 minutes - 10 ML algorithms in 45 minutes | machine learning algorithms, for data science | machine learning #machinelearning ...

Intro

What is ML

Linear Regression

Logistic Linear Regression

Decision Tree

Random Forest

Adaptive Boost

Gradient Boost

Logistic Regression

KNearest Neighbor

Support Vector Machines

Unsupervised Learning

Collaborative Filtering

Classification Metrics - EXPLAINED!! - Classification Metrics - EXPLAINED!! by Satyajit Pattnaik 4,755 views 2 years ago 19 minutes - The 5 **Classification Evaluation**, metrics every Data Scientist must know And when exactly to use them? We all have created ...

6 Types of Classification Algorithms - 6 Types of Classification Algorithms by Analytics India Magazine 80,658 views 6 years ago 2 minutes, 51 seconds - Here are some of the most commonly used **classification algorithms**, -- Logistic Regression, Naïve Bayes, Stochastic Gradient ...

8.5. Model Selection in Machine Learning | How to choose the right Machine Learning model - 8.5. Model Selection in Machine Learning | How to choose the right Machine Learning model by Siddhardhan 24,222 views 1 year ago 15 minutes - All presentation files for the Machine **Learning**, course as PDF for as low as ¹200 (INR): Drop a mail to ...

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