

Semester Program

Academic Discipline

Machine Learning and Applications

GENERAL OBJECTIVE:

The course aims to provide students with an introduction for the area of machine learning, studying the basis for the more basic types of algorithms.

SPECIFIC OBJECTIVES:

- Introduction for entry level algorithms (decision trees, KNN, K-Means, Naive Bayes);
- Write programs that implements the studied algorithms;
- Work with Python libraries for machine learning;
- Solve problems with machine learning.

PROGRAM:

1. Introductions & Presentation of the course
2. Introduction to machine learning;
3. Supervised learning;
4. Information gain;
5. Decision trees;
6. ID3 and C4.5;
7. Introduction to Bayesian paradigm;
8. Naive Bayes;
9. Bayesian Network;
10. Distance measurements;
11. KNN;
12. Regression;
13. Regression algorithms;
14. Unsupervised learning;
15. K-Means;
16. Key Takeaways & End of course

ARInter

Assessoria de
Relações Internacionais

CPS
Centro
Paula Souza

SÃO PAULO
GOVERNO DO ESTADO