TIC

TALENTO TECH

REGIÓN 3

CAUCA – NARIÑO

BOOTCAMP

ENGLISH CODE

Universidad Tecnológica de Pereira

faceIT

TIC

MÓDULO 3 NIVEL INTEGRADOR

TALENTO TECH

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Contextualización de mis aprendizajes

This module focuses on imparting basic vocabulary and understanding of key concepts and texts in the field of Cloud Architecture Patterns and Cloud Native Patterns: Designing Change-Tolerant Software, Cloud Computing Explained, and The NIST Definition of Cloud Computing. The course structure integrates practical language exercises with an introduction to fundamental technical knowledge, making it suitable for those seeking to develop both their linguistic and technical proficiency in Cloud architecture.

Contextualización de mis aprendizajes

In the realm of data science and machine learning, the exploration of "Classification and Regression Algorithms" serves as a pivotal focus area. This topic delves into the core methodologies and techniques employed for categorizing and predicting outcomes based on datasets. Classification algorithms, such as decision trees, support vector machines, and k-nearest neighbors, are instrumental in assigning labels to data points, making them invaluable for tasks like spam detection, image recognition, and disease diagnosis. On the other hand, regression algorithms, including linear regression and polynomial regression, facilitate the prediction of numeric values, contributing to areas such as stock price forecasting and sales predictions. Understanding these algorithms is paramount for learners aspiring to harness the predictive power of machine learning in diverse applications. This exploration encompasses not only the theoretical foundations of these algorithms but also hands-on applications, ensuring learners can proficiently apply them to real-world scenarios. Through the study of "Classification and Regression Algorithms," learners embark on a journey to unravel the intricacies of data-driven decision-making, enabling them to contribute meaningfully to the dynamic field of machine learning.

Objetivo general

UNIDAD 3

- Equip learners with a comprehensive understanding of the fundamental methodologies and techniques in machine learning essential for categorizing and predicting outcomes.
- Provide learners with a solid theoretical foundation and practical skills to effectively apply classification algorithms, including decision trees, support vector machines, and k-nearest neighbors, for tasks such as image recognition and spam detection.

Competencias a desarrollar

- Linguistic competence.
- Pragmatic competence.
- Sociolinguistic competence.

Linguistic Competence: Learners will acquire a strong command of the technical language and terminology associated with classification and regression algorithms. This includes understanding terms like features, labels, training data, and model evaluation metrics.

Pragmatic Competence: Learners will develop pragmatic competence by understanding how to apply classification and regression algorithms in different real-world contexts. This involves selecting the most suitable algorithm based on the nature of the problem and interpreting results in practical scenarios.

Competencias a desarrollar

Sociolinguistic Competence: Sociolinguistic competence will be fostered through collaborative aspects of data science. Learners will understand how to effectively communicate algorithmic findings to diverse stakeholders, considering the varying perspectives and knowledge levels within a team or organization.

Activación de saberes previos

PLANTEAMIENTO DE LA SESIÓN

1) Socialize the technology idiom of the day.
2) Discussion questions: "Regression vs. Classification in Machine Learning"
3) Explain what the skimming strategy is.
4) Reading comprehension activity: "Regression vs. Classification in Machine Learning"
5) True/ False activity
6) Socialization key vocabulary: "5 Regression Algorithms you should know – Introductory Guide!"
7) Reading comprehension activity #2: "5 Regression Algorithms you should know – Introductory Guide!"
8) Multiple choice activity.
9) Socialization key vocabulary reading #3: "Regression and Classification | Supervised Machine Learning"

MATERIALES

- Reading: "Regression vs. Classification in Machine Learning"
- Reading: "5 Regression Algorithms you should know – Introductory Guide!"
- Reading: "Regression and Classification | Supervised Machine Learning"

Activación de saberes previos

PLANTEAMIENTO DE LA SESIÓN

10) Reading comprehension #3: "Regression and Classification | Supervised Machine Learning"
11) Matching heading definition.
12) Socialization of vocabulary: "Regression Versus Classification Machine Learning: What's the Difference?"
13) Reading comprehension: "Regression Versus Classification Machine Learning: What's the Difference?"
14) Mind Map activity.

MATERIALES

- Reading: "Regression Versus Classification Machine Learning: What's the Difference?"