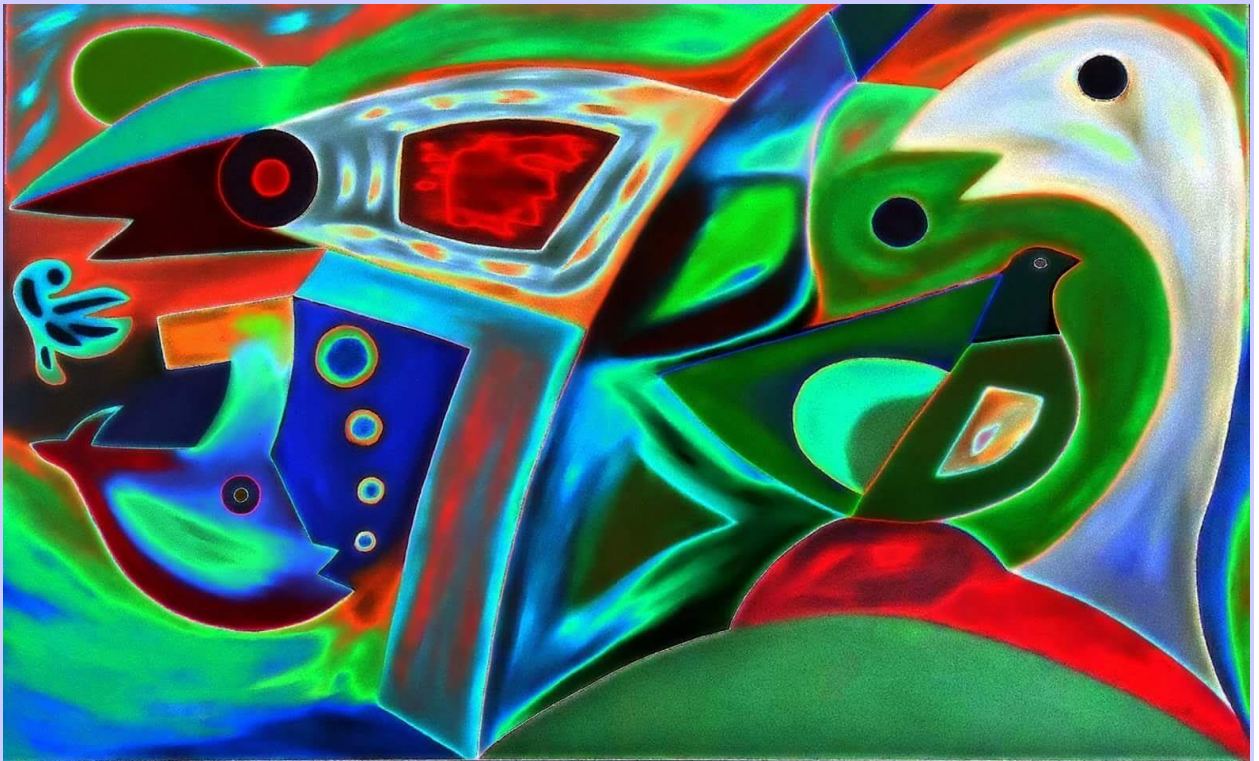


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Sentiment Evolution Analysis and Association Rule Mining for COVID-19 Tweets

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Abstract. This article presents a data mining study carried out on social media users in the context of COVID-19 and offers four main contributions. The first one consists in the construction of a COVID-19 dataset composed of tweets posted by users during the first stages of the virus propagation. The second contribution offers a sample of the interactions between users on topics related to the pandemic. The third contribution is a sentiment analysis, which explores the evolution of emotions throughout time, while the fourth one is an association rule mining task. The indicators determined by statistics and the results obtained from sentiment analysis and association rule mining are eloquent. For instance, signs of an upcoming worldwide economic crisis were clearly detected at an early stage in this study. Overall results are promising and can be exploited in the prediction of the aftermath of COVID-19 and similar crisis in the future.

Keywords: COVID-19, Twitter Dataset, Tweets Analytics, Sentiment Analysis, Sentiment Evolution, Data Mining, Association Rule Mining, FP-growth.

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Digitalization and Backward Design take the finance teaching techniques and study plan strategy one step further

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Abstract. Digitization has been around for several years, but its use has become a necessity with the Covid-19 pandemic. Lockdown forced us to work remotely overnight, to use digital networks to communicate, make payments, learn all sectors of activity were forced to adapt to the digital age in one night. This paper shows how teaching, research, and the study plan must adapt to the new communication requirements and students' needs to achieve the course learning outcomes in a virtual environment. The paper proposes a realistic academic plan design - backward. Taking into account new environmental and digital challenges, the backward design facilitates the decision on the content of the study plan, the elimination of less important parts, and the application of new communication and assessment techniques.

Keywords: digitalization; backward design; teaching techniques for finance.

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Teaching techniques adapted for online delivery to achieve course learning outcomes in a virtual environment

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Abstract. Today we are moving from traditional learning to e-learning via digital means. The entire humanity *learned* how to adapt *overnight* to digital life and leave the traditional doing things behind. Digitization has been around for several years, but its use has become a necessity with the Covid-19 pandemic. The blockade forced us to work remotely overnight, to use digital networks to communicate, make payments, learn, all sectors of activity had to adapt to the digital age in one night. This paper shows how the teaching and learning approaches need to adapt to new communication requirements and students' needs to achieve course learning outcomes in a virtual environment. This paper uses both a quantitative and qualitative method to analyze the professors and students' perspectives on the techniques of online teaching-learning, during the isolation period and after, and what are the best methods recommended to be used for online learning taking into consideration how students can maintain their class's attention and how can get actively involved in a learning process. The value of this study is to develop a holistic image of online teaching-learning-assessment activities, to ensure the efficiency and quality of the educational process in the university environment.

Keywords: online teaching and learning techniques; means of engagement; higher education.

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The effects of different genres of music on passersby

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Abstract. Music preferences reflect both experience and societal or cultural influences. The characteristics of the music genre include both structural style and societal connotations. This study investigated reactions to different types of music. The behavior of passersby was observed as music from two stereotypically “opposite” genres, hip-hop and classical, was played by the researcher while jogging past them. It was hypothesized that due to societal stereotypes and reputations of these genres’ participants would react negatively toward hip-hop and favorably toward classical. As the study was conducted, participants were observed during six different outings over a three-week period. The researcher jogged at the same time of day and over the same route with either hip-hop or classical music playing. Passersby were observed on their facial expressions, any changes in behavior, and their body language to determine their overall reaction to the music, as being “positive”, “negative”, or “neutral.” The results indicate that older passersby responded negatively to hip-hop and positively to classical music. Younger age groups often had opposite reactions. This study provides insight into different populations’ responses to opposite genres of music and how societal stereotypes may have affected these responses.

Key words: music, genre, hip-hop, rap, classical, preference, digital music, community-based, outdoor venue.

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Existing in Ethereum: The autographic ontology of the non-fungible token artwork

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Abstract. This paper examines the concept that legitimate autographic identity may be granted to digital images created as a non-fungible token (NFT). The blockchain technology coded permanently into minted NFT's keep track of the legitimacy of authorship and ownership, keeping them from being duplicated and removing them from the realm of allographic art. Questions arise of what 'legitimacy' and 'ownership' for a digital image—which are so easily reproduced and circulated—even look like. The main question that must be answered is whether the backend coding of a digital file is sufficient to alter its ontology into a token of one-of-a-kind autographic work, or if it only what is visible to the viewer of the image matters for its replicability and allographic ontological nature.

Keywords: Digital art, non-fungible token, blockchain technology, digital image, authorship, ownership, crypto art, digital artwork, allographic.

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