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Editorial Comments: JCMM Volume 3 Issue 1

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This issue of the *Journal of Computers, Mechanical and Management* (JCMM) encompasses a selection of research articles across a range of disciplines, including advanced machining methods, sentiment analysis, and the effects of macroeconomic factors on stock prices. Each study presents new perspectives and empirical findings that advance the understanding in these diverse fields.

The article by Bhat, Tandon [1], and Ahmad explores the optimization of parameters in Abrasive Water Jet Machining (AWJM) for 316 stainless steel. By examining the effects of traverse speed, standoff distance, and abrasive flow rate, the study demonstrates how these parameters influence surface roughness. Employing the Taguchi method and analysis of variance, the authors establish a regression model to predict optimal machining conditions, offering valuable insights for industrial applications in manufacturing stainless steel components.

Ahmed Shetu [2] provides a comprehensive review of non-destructive testing (NDT) techniques for aerospace composite materials, crucial for ensuring structural integrity and safety. The study examines methods like ultrasonic testing, infrared thermography, and eddy current testing, discussing their advantages, limitations, and practical applications. This work highlights future directions for integrating machine learning into NDT processes, underscoring its potential to enhance diagnostic precision and reduce inspection time.

Kulkarni and Kulkarni [3] delve into probability sampling through an experimental study on calculating the value of π using the Monte Carlo simulation method. Their work employs non-parametric tests, including the Chi-Square and Friedman's test, to evaluate the randomness and distribution of simulation results. This research contributes to the field of mathematical simulations by showcasing practical applications of probability theory in estimating irrational numbers [3].

The study by Malhotra and Sethi [4] conducts sentiment analysis on Twitter data using supervised machine learning algorithms. The authors implement models such as Naïve Bayes, Decision Trees, and Support Vector Machines to classify tweets into positive, neutral, or negative sentiments. Their findings indicate that Support Vector Machines achieve the highest accuracy, offering insights for organizations looking to leverage social media sentiment for decision-making.

Nagvekar et al. [5] analyze the impact of inflation, bond yield rates, and the VIX index on the stock prices of Indian banks across different market capitalizations. Through regression analysis, they demonstrate how macroeconomic variables affect banks of varying sizes differently, with small-cap banks exhibiting the most sensitivity to inflation. This study offers valuable guidance for investors and policymakers by highlighting the interplay between economic indicators and banking stock performance.

This issue reflects the journal's commitment to publishing impactful research that spans a range of topics, from engineering and mathematics to data analysis and finance. Each article not only advances theoretical knowledge but also provides practical implications for industry and academia alike.

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