

## **Editorial**

We present the first issue of the eighteenth volume of the **International Journal of Web Applications** with the research indicated below.

In the opening paper, “**Modeling User Navigation with Pattern Mining, Markov Chains, and LSTM Networks**,” the authors studied the effectiveness of three modeling paradigms frequent pattern mining, Markov chains, and Long Short Term Memory (LSTM) networks in predicting user navigation behavior on the MSNBC Anonymous Web Navigation dataset. They used one million browsing behaviour and addressed the “sticky” user behavior where individuals tend to remain within a single content category. These results indicate structured, low entropy clickstream data and the use of classical probabilistic models, such as Markov chains.

In the second paper, “**Digital Infrastructure and Developer Ecosystems: A Dual Dataset Framework for Cross-Domain Analysis of Technological Adoption**,” the authors aggregated 45 years of country level telecommunications indicators spanning mobile penetration, internet adoption, and broadband diffusion across 217 countries. They employed a snapshot of 1,247 trending GitHub repositories. The framework they introduced enabled novel cross domain inquiries into the relationship between national infrastructure quality and global innovation patterns.

In the last paper, “**Detecting Fundamental Revaluation Episodes: Volume Spikes and Overnight Price Gaps in Amazon Stock (2000–2025)**,” the authors studied the market anomalies in Amazon’s stock price behavior through a 25-year analysis of daily OHLCV data to identify high probability markers of fundamental revaluation episodes. The results indicate that extreme volume events serve as critical inflection points at which market consensus undergoes rapid recalibration. This framework allows practitioners a robust methodology for distinguishing noise from signal in price behaviour.

We hope that these papers generate greater interest among researchers and students.

## **Editors**