## An Application to Prioritize Emails Based on Predefined Factors and Sentimentality

06 Nov ET24

Thejan Rajapakshe<sup>1,2(\*)</sup>, G.H.P Vajiramali<sup>2</sup>

<sup>1</sup>Center for Health, Informatics and Economic Research, University of Southern Queensland, Brisbane, Australia, <sup>2</sup>CodeGen International, Maradana, Sri Lanka

(\*) Email: Thejan.Rajapakshe@usq.edu.au

Over the last few decades emails have evolved into one of the widely used communication methods around the globe for business communication. This has paved the way for companies to deal with large number of emails in customer-based roles such as customer inquiries, complains, feedbacks, service failures, and etc. Some emails might carry urgent matters which need immediate attention while some might just be customer feedbacks. The process of going through emails is time consuming, painstaking and expensive. Thus, the company is at risk in failing to attend urgent emails which require immediate attention. Hence, an important concern is raised on how to prioritize massive number of emails received by a company in an effective way. In this study, an email sorting mechanism is proposed based on content significance, gravity and sentimental values. Each email is analyzed and classified using natural language processing algorithms of an accuracy of 89% and sentiment analyzers. A scoring mechanism was generated indicating a numerical score for each email. Emails are added to a prioritized queue based on its score. Prioritizing emails based on its content value without actually going through them provides a greater advantage for companies. It increases coherence, productivity as well as efficiency. Content significance, gravity and sentimental value can be used to prioritize a bulk of emails which may lead to increase the productivity of business communication process.

**Keywords:** Natural language processing, sentiment analysis, machine learning, email sorting, text processing