SUS16

DEVELOPING OPEN SOURCE POWERFUL MEDICAL DECISION MAKING TOOLS OVER THREADED HARDWARE, TO PROMOTE SOCIETAL SUSTAINABILITY – PHASE I

Benjamin Sanders[1], Viviana Tran[2]

[1]California Baptist University, Riverside, CA, USA. [2]University of California, Berkeley, CA, USA

Abstract

The COVID-19 pandemic highlighted the importance of medical transparency for societal sustainability. Fast, accurate electrocardiogram (ECG) readings through medical personnel are critical but often subjective and expensive. High-quality ECG software exists but is often closed-source and costly, limiting accessibility. This study seeks to break this pattern by developing open-source implementations under a CC-BY-4.0 license. Literature review identified performance gaps in current ECG software, specifically in hardware threading. Thus, future work includes developing robust CNN models using public ECG datasets. This intends to democratize access to advanced medical diagnostics, fostering global collaboration and innovation, and improving preparedness for future health crises.

Conference Track

Sustainability Issues in Decision Making