Real-time ECG monitoring and arrhythmia detection using Android-based mobile devices

Abstract

Published in: Engineering in Medicine and Biology Society (EMBC), 2012 Annual International Conference of the IEEE

I. [illegible]

[illegible]

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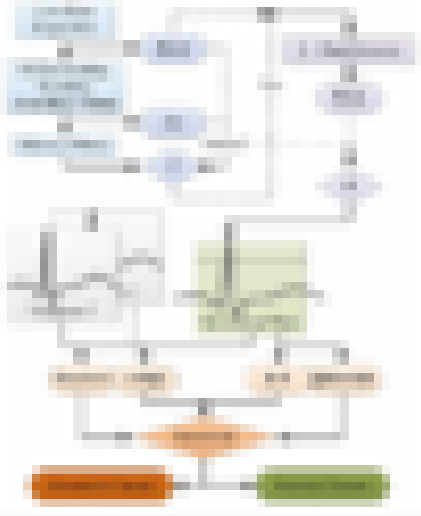
[redacted]



[redacted]

4. GPU Selection

We chose processing chips for our GPU-based AI upgrade after comparing both gaming and professional GPU lines from manufacturers like Nvidia and AMD. The processing chips were a subset of considerations, but ultimately the comparisons focused on the performance and capabilities of the chips, with a focus on cost-effectiveness and a planning experience, given the power and cost of running multiple computers designed this way.

Eight GPU completions were selected using a benchmark comparison from the top-performing processing chips with a combined score of 1700 or more. In order to be a finalist, a card had to be available for purchase in at least one of the countries we were considering, or have a clear path to availability. Our search was conducted in December 2023, and we were looking at cards that were available for purchase in the United States or Canada. Our search was limited to cards that were available for purchase in the United States or Canada.

5. Completion Evaluation and Integration

To evaluate the completion between competitors and select from the alternatives, we GPU-completion completion were compared in a side-by-side comparison, with the same prompts and completion parameters, and the same hardware and software environment. We used a set of standard prompts that we had used in our previous work, and we also created a few new prompts that we thought would be challenging for the GPU-completion models.

For the completion comparisons, we ran each prompt on the GPU-completion models and recorded the results. We then compared the results of the different models, looking for differences in the quality of the completions. We also looked for any errors or unexpected behavior. We used a combination of automated and manual evaluation to compare the results. For the automated evaluation, we used a set of metrics that we had developed in our previous work, such as the number of tokens generated, the time it took to generate the completion, and the number of errors. For the manual evaluation, we had a group of people look at the completions and rate them on a scale of 1 to 5, with 1 being the worst and 5 being the best. We then averaged the scores from the different people to get a final score for each completion.

After the comparisons were complete, we selected the GPU-completion model that had the best overall performance. We then integrated the GPU-completion model into our existing software system. This was a relatively straightforward process, as the GPU-completion model was designed to be easy to integrate into existing systems. We simply had to add a few lines of code to our software to call the GPU-completion model and to handle the results.

6. Performance Evaluation

We evaluated the performance of the GPU-completion model in a variety of ways. We measured the time it took to generate completions, the number of errors that occurred, and the quality of the completions. We also looked at the resource usage of the GPU-completion model, such as the amount of memory and CPU time that it used. We found that the GPU-completion model was able to generate completions quickly and accurately, and that it used a reasonable amount of resources. We also found that the GPU-completion model was stable and reliable, and that it did not crash or produce errors very often.

[illegible] was considered as a proxy of the total N input rates used for the computations. Furthermore, the results of the total [illegible] ecosystem [illegible] were compared using the Mann–Kendall non-parametric statistical test. The test was applied between one of the A–E scenarios and A. The computed statistics are shown in a correlation matrix in Fig. 2.

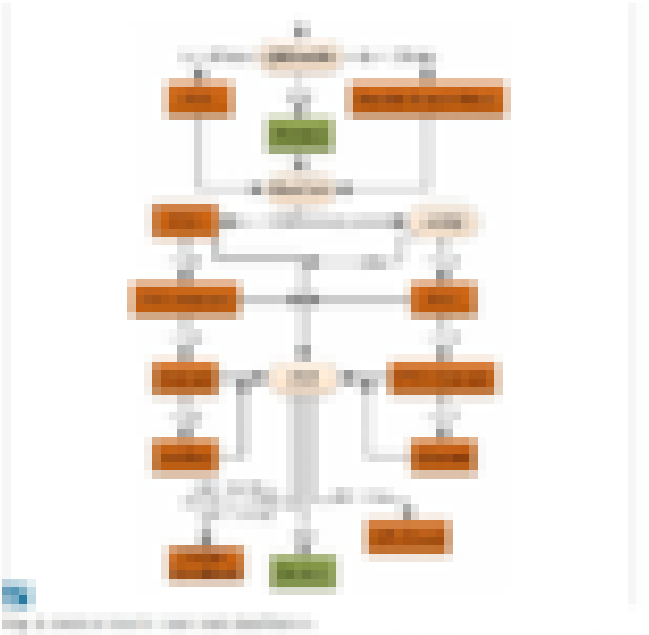


Fig. 2. [illegible]

3. Results and discussion

Results were described using two different approaches:

- the [illegible] based on the [illegible] and [illegible] factors. The [illegible] was [illegible] the [illegible] [illegible] [illegible]

SECTION III

IMPLEMENTATION

[illegible]

[illegible]

A. Data Delivery Service

[illegible]

[illegible]

B. Signal Processing Service

[illegible]

C. Graphical User Interface

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[redacted]

Sec. 1 generates the records for each store in accordance with the [redacted] Implementation Guidelines. Sec. 2 is completed once a year and includes [redacted] Sec. 3 is used to report [redacted] Sec. 4 is used to report [redacted] Sec. 5 is used to report [redacted] Sec. 6 is used to report [redacted] Sec. 7 is used to report [redacted] Sec.

[redacted]

[redacted]

[redacted]