Group ID: 02

Reviewed project proposal title: Near – IR Spectroscopy

## Review of the proposal:

In this proposed project, their main aim is to use near-infrared spectrum to create a low cost time efficient and reliable method which projects the vein map of a human body. And it is a real time projection.

The title of the project is "Near – IR Spectroscopy". But it does not reflect what they are trying to do exactly. It is better if the title includes that the project is regarding vein mapping and the uniqueness of this project compared with the already invented devices for this purpose.

Since there are several researches [1] on low cost near-IR imaging for vein mapping, better to specify how their research is going to vary from them. In the short description of the project, they have highlighted that the price of the available systems in this area is quite expensive for Sri Lanka. So as mentioned above since there are several approaches for vein mapping systems using near-IR, it would be better if they highlight this matter in their project aim also. So that everyone can understand how it is going to vary from others.

Their proposal is specified that they are going to use low cost hardware components. That is a good approach and better if they can do several other specifications also. And suggesting to specify whether the proposed device is mobile or not.

This project is feasible since there are successful previous approaches in that area. They can use those researches as a starting point and conduct their research in a new perspective. As this project is a clinical based technical project suggesting to refer to the specifications of previous approaches. Since most of the previous approaches had limitations that restricted their applicability to clinical practice.

It is better to follow the standard format when citing the sources in the references section. Other than the above specified things, the overall writing of the proposal is good.

Most importantly this project proposal addresses an important area for healthcare systems and also for the well being of the society. This proposal will make a huge positive impact on the healthcare system if they can get these systems for an affordable price.

## References

- S. Juric, V. Flis, M.Debevec, A.Holzinger and B.Zalik, 2012. Towards a Low-Cost Mobile Subcutaneous Vein Detection Solution Using Near-Infrared Spectroscopy. *The Scientific World Journal*, 2014, 15.
- AccuVein. 2020. Vein Visualization Technology | AccuVein. [ONLINE] Available at: https://www.accuvein.com/why-accuvein/vein-visualization-technology/. [Accessed 23 July 2020].