Proposal for Graduation Project 2018

QuickLab: Automatic detection of blood disease

Medical laboratory suffers from extensive load of diagnosis tasks. It is hard to perform accurate results within a short time. It requires additional manpower as the diagnosis of several cases is performed manually. QuickLab is a software designed for blood disease diagnosis. Based on several image processing techniques, QuickLab can easily compute several factors that would lead to the diagnosis close to the accurate one. The system is also based on artificial intelligence technique to be feed by the human diagnosis to accumulate knowledge for future cases.

Input/Output:

- Input: digital images of blood samples
- Output: diagnosis report

Knowledge required:

- Image Processing
- Programing
- Artificial intelligence
- Pattern recognition

Beneficial entities:

- Medical laboratories
- Hospitals

Hardware/Software requirements:

- High resolution digital camera
- Dataset from medical laboratories

Expected outcome:

- New knowledge   (some how)
- Research paper   (yes)
- Commercial product   (yes)