**BHARAT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

Project title: Blood group detection using Image processing

Innovation:

On day to day scale of things blood group detection may not be that important of a task but it is highly important in the field of medicine. Especially before operations of high magnitude like organ transplants and blood transfusion. This may sometimes be an emergency. But our traditional methods of finding blood group in labs take a long time and is a tedious process. It also has a chance of negligent human errors .To overcome this we have devised software to process the image of blood samples which has different reagents and determine the blood time in minimum possible time.

Objectives of the project:

* Reduce time to determine blood type.
* Eliminate human error as much as possible.
* Open possibilities for further development by giving entire analysis of bool sample

Scope of the project:

* A software the is easily manageable by user and determines blood group by applying image processing technique on the uploaded image.

System Design:

Block Diagram:

Implementation:

The software that is built is installed in a computer with computational power as to handle pythons powerful libraries and other programs. Once the image is uploaded by the user, the software determines the blood group.

Summary:

This is aimed at delivering just the blood group with maximum possible accuracy. There is a lot of scope for improvement and a expandable base for entire analysis of blood sample using image processing. We hope this would greatly benefit the field of medicine.

References:

Prototypes for determination of pre-transfusion tests based on image processing techniques-BIET

Automatic system for determination of blood types using image processing techniques-BIET