

# Literature survey-Plasma Donor Application

## **1. Mechanisms of Physical Plasma-Included Blood Coagulation : What Happens at the Treatment-Interface**

Major blood loss is a risk factor during surgery. Electrocauterization is frequently applied for necrotizing the tissue and thereby stops bleeding (hemostasis). However, the burned tissue is prone to detaching, generating the risk of internal bleeding after surgery. Plasma treatment might be an alternative to efficient hemostasis, which we have previously demonstrated in a mouse model and in human donor blood.

### **Author:**

Sander Bekeschus; Broder Poschkamp; Thomas von Woedtke; Klaus-Dieter Weltmann;

### **Published in:**

2021 IEEE International Conference on Plasma Science (ICOPS)

**DOI:** 10.1109/ICOPS36761.2021.9588613

## **2.A Cross-Platform Blood Donation Application with a Real-Time, Intelligent, and Rational Recommendation System**

Blood or plasma transmission is one of the most effective treatments for critical diseases like Covid 19. Nowadays, voluntary blood donation has become the major source of blood supply. Several mobile applications are currently available to establish the initial communication between blood donors and receivers. Recommending the right potential donor during a blood search can save the life of a critical patient with an immediate response from the donor. However, the requirement of an advanced recommendation system has not been addressed by any of the existing mobile applications. In our research work, we have designed a real-time, intelligent, and rational recommendation system using sentiment analysis of the user's feedback, response rate of the donor, and the current geo-location information and finally develop a cross-platform application for blood collection and distribution system.

**Author:** Md Rafat Jamader Maraz; Rashik Rahman; Md. Mehedi Ul Hasnain; Hasan Murad;

### **Published in:**

2021 International Conference on Electronics, Communications and Information Technology (ICECIT)

**DOI:** 10.1109/ICECIT54077.2021.9641395

### **3.Hospitals and Blood Donors Finding System using Android**

The rapid growth of Information and Communication Technologies (ICTs) makes the way of using them in healthcare organizations worldwide. Multiple features have been combined in this android application. Various kinds of hospital searching applications developed in android Smartphones which help the needy people. The patient can inquest the medical facilities based on their needs. This application provides the available hospital and doctors details based on the patient's nearby location. The adjoining position of medical center is reckoned with the in-grained virtue of GPS in Smartphone.

**Author:**

P. Sivakumar; Sivaganaes C.; Vimalpriyan U.; Seranjivi K.

**Published in:**

2020 International Conference on System, Computation, Automation and Networking (ICSCAN)

**DOI:** 10.1109/ICSCAN49426.2020.9262339

### **4.Analyzing Blood Donation probabilities and number of possible donors**

In the paper, many critical data of donors were used. A donor's blood donation frequency and the last donation time were included in the utilized data. The utilization of these data types was very important for providing a solution to determine blood donation probabilities. By using many machine learning approaches on blood transfusion data, it is tried to be estimated, if a possible donor will provide blood donation again. Used algorithms were compared by computing their classification performances.

**Author:** Pinar KIRCI; Seyma AKTAS; Burcu SEVINC

**Published in:**

2020 International Congress on Human-Computer Interaction, Optimization and Robotic Applications (HORA)

**DOI:** 10.1109/HORA49412.2020.9152872

## **5. Zomraty: E-Blood Bank Android Application for Donors and Life Savers**

the Zomraty Application, which aims primarily to save thousands of lives in Algeria as a basic first stage for people who need a blood transfusion. Where it connects volunteers to donate blood and people in need by providing detailed information about the donor that allows the needy person to choose the volunteer who is closest and most suitable.

**Author:** Mohammed Anis Oukebdane; Samir Ghouali; Karima Ghazali; Mohammed Feham

**Published in:** 2020 2nd International Workshop on Human-Centric Smart Environments for Health and Well-being (IHSH)

**DOI:** 10.1109/IHSH51661.2021.9378752

## **6. mHealth: Blood donation application using android smartphone**

mHealth is new horizons for health that offers healthcare services by utilizing the mobile devices and communication technologies. In health care services, blood donation is a complex process and consumes time to find some donor who has the compatibility of blood group with the patient. We developed android-based blood donation application as mHealth solutions to establish a connection between the requester and donor at anytime and anywhere. The objective of this application is to provide the information about the requested blood and number of available donors around those localities.

**Author:** Muhammad Fahim; Halil Ibrahim Cebe; Jawad Rasheed; Farzad Kiani

**Published in:** 2016 Sixth International Conference on Digital Information and Communication Technology and its Applications (DICTAP)

**DOI:** 10.1109/DICTAP.2016.7543997