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Registration, visualization and analysis of the biological
objects image periodically fluctuation.

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Developed systems and means for registration, visualization and analysis the bioenergetic processes in humanity organism and definite possible applications in medicine, biometrics and electronics.

The first system visualized bioimage in modulated by pseudocolor image in which the intensity of fluctuation is modulated by color. Received bioimage calculate frame difference according to formula

$$R_i = \left\{ \left[\sum_1^M |X_{i,k} - X_{i,k+1}|^L \right] : N \right\} - D$$

Second type of system refer 3d pulse wave registration. Fingerprint image gives the 3d information from user's pulse. It is known, that east medicine diagnoses more than one hundred illnesses by pulse. Using the developed method we can diagnoses illnesses by standard PC.

It is possible to realize this developments in any standard electronic device. For example, phone with 3d pulse wave registration module can measure the physiological parameters of user (heart frequency, arterial pressure, oxygen in blood etc.), to notice when parameters go away from standard norms and to affect for user's parameters normalization. So, harmful mobile phone can transformed into useful biophone with diagnostic or medical features.