

## Statement of Purpose:

Uday S Ghatge: – Camera culture - Media Lab

Joining the Camera Culture Group will be just like marriage for me.

### Why Camera Culture? :

I have designed the BIO DIAGNOSTIC CAMERA to diagnose blood groups and also other diagnostic requirements with just one click of a camera. The Bio Diagnostic Camera will add new dimensions in the field of medical diagnosis and life sciences. The Bio Diagnostic Camera not only makes the test simple but also speeds up the diagnosis process and a single device can be utilized for multipurpose diagnostic tests with affordable cost. To demonstrate the device capability, initially it is intended to diagnose HIV disease from a given blood sample. The device works on the phenomenon of "Uday - Bio Electron Shift". We observed that during electron spin the uplift force of body along with its charge particle consumes the RF/IR frequencies transmitted by device. Such state of blood sample is captured by the camera and then the captured data is processed by an image processing algorithm to apply pattern matching techniques. The next step in this research is to find a cure for HIV by using some electromagnetic frequency.

Secondly, suppose we made a camera which can measure the radius of curvature of earth at any point of contact with just one click then that would be remarkable work for space science. This is based on electron dynamics, wave functions and their interactions with other mediums. I would like to take the camera family into different aspects. Using my database I can relate all technologies - touch panels, material electronics, touch screens, software- hardware collaborations and future products to generate new inventions.

Camera culture has strong research mentors and has started work from basic mathematics to product development, so I would like to establish a long term relationship with this culture. I have a strong understanding to relate materials with mathematics. I also excel in accidental research. I know how to convert science into technology. I have other perspectives which I can contribute as per the goals of the team. I can manufacture anything and can bring a concept to project and the project to product in ultra minimum time. The ongoing research work of Professor Ramesh Raskar is in line with my research interests and expertise because I have a strong understanding of electron dynamics and related mathematics. I want to be the best student of this group. I am also interested in joining EYE NETRA team and prototypes development groups. In addition, with my independent research approach, I can strongly support Professor Ramesh Raskar and other groups in critical operations, financial strategies, project budgeting, R&D, product portfolio, investor relationship, business plans, finding vendors and convincing them for contract manufacturing, multi disciplinary activities, building an international contacts database, making strategies, signing legal MoU, launching activities and making a sustainable brand in the market. Keeping creativity and critical imagination as a base, I want to handle all responsibilities with good standards. I am certain that I can contribute to the long term research, if given an opportunity to learn and utilize my energy, and would like to grow under camera culture building a long term association. I would like to be a part of a system, working for the sake of all living beings.

## MY FOUR WORK INTERESTS

### 1. Invention

Being a strong follower of physics and mathematics I always love to explore new concepts and study them in depth, which makes me think out of the way. The basics help me understand the exact solution for each concept. In addition to research work, I can establish vendor relationships to source optics, sensors and actuators to translate any research into successful product.

### 2. Joining the EYE NETRA and other teams.

I am highly interested in joining EYE NETRA team and prototypes development groups. In addition to my independent research approach, I can work with other groups for R&D, budgeting, critical operations, financial strategies, product portfolio, finding investors, maintaining investor relationships, preparing business plans, finding vendors and convincing them for contract manufacturing, multidisciplinary activities, building international contacts, making strategies, signing legal MoU, creating a sustainable brand in the market etc.

**\*\***You can check the brand awareness of product **KAKRIKA** (which means storage in Sanskrit) that my company created worldwide.

I will bring more commercial and business expansion perspectives to EYE NETRA and other product's portfolios. I can help to create an innovative system in EYE NETRA group with an organizational culture of self sustainability and self leadership.

### 3. Would like to go with the mission. - Long term

I have other perspectives which I can apply to achieve the current goals of the group. I am confident that, I can conceptualize and realize the concept as a project and implement the same using the least amount of time and resources. I will continue my trend of inventing out of the box ideas.

### 4. Financial contribution, if required.

Along with research work, financially, if require, I personally can able to support some research accidents and experiments.