

## Project Definition

My project is about creating an automatically flying camera which has an artificial intelligence to chase you while you are in action.

## Goals and Objectives

Film and video making need a production and a well organised team work.

Since GoPro entered our lives with its unique concept of design, It allows us to shoot movies without need of anyone else. It is in GoPro's nature.

But it is not enough. People still need assistants to get footages even for the gopro.

I would like to minimize dependence of people while shooting a video.

I am going to do an automatic flying camera which will only shoot what we want.

On addition, being able to obtain a really smooth footage is a really important issue. Since this device is flying, there will be no vibration.

## Target Audience

People who are interested in extreme video making, filming and of course interested in extreme sports.

Post producers

People who are interested in audiovisual techniques.

and mostly the one who need or had to work alone.

## Project History

Video making started for me with GoPro. Without thinking about storyboard and concept, I shot everything.

While time passes I needed people to assist me. But most of the time, there were not. I wanted to minimise the dependency on other people when it comes to video making.

Sports, an inevitable aspect of my life. Since three years, I have been making some time for surfing, snowboarding and sailing.

I brought my GoPro video camera two years ago and since that, I have been filming what I am doing.

These aspects about extreme sports will be inevitable for me and I am definitely building a project with these.

Video making, Since technology is improving we are able to shoot videos with our DSLR cameras, small HD video cameras such as GoPro supported us to shoot videos more than ever.

Accordingly, I am also interested in filming the "impossible". I shot several videos based on the concept of action sports, but those are fun videos with basic editing.

...I am going to take it to the next level.

In addition to video shooting, I discovered chickens.

For more info, please visit youtube links that I posted on students blog.

Introduction to interaction,

Projection, using a projector is going to enhance my projects interaction ability.

I really envy this guys project about projectors. But Since thinking about the feasibility of the project, become of secondary importance.

## Detailed Project Description

There will be a GoPro implemented on a quadrocopter.

There will be an arduino device implemented in that quadrocopter.

There will be a sensor and in addition, receiver of this sensor on quadrocopter.

Where you go with the sensor on you, quadrocopter will follow you, in a optimised altitude.

## Phases

Getting a quadrocopter.

Calculating the optimised altitude for a flying object indoor and outdoor.

implementing arduino on a quadrocopter and making it possible to cover a distance automatically. Without sensors, only with codes.

Upgrading the arduino and implementing sensor on it. For tracing.

## Risks and Difficulties.

I am doing a mechatronical device. Which I haven't done it before.

Codes are going to be the core of this project. If they don't work, It will become a severe obstacle for me.

## References, influences.

What is a quadrocopter?

<http://www.dji.com/product/phantom/>

<http://ardrone2.parrot.com/#>

influence of automatic assistant

[http://www.youtube.com/watch?v=NC0hG0\\_rXs8](http://www.youtube.com/watch?v=NC0hG0_rXs8)

Motivation for smooth and non-vibrating videos.

<http://www.youtube.com/watch?v=T7XzyZB6WEM>

Influence of tracking camera via coordinates

[http://www.youtube.com/watch?v=2-9UAJ4v\\_8M&feature=youtu.be](http://www.youtube.com/watch?v=2-9UAJ4v_8M&feature=youtu.be)