## Part III: Augmented Reality 101

## (a). Augmenting an Image

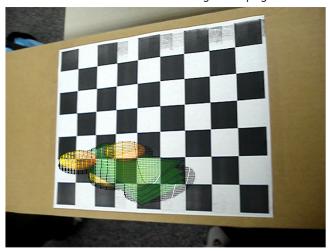
```
[clipart,~,Alpha]=imread("5.png");
height=150;
width=100;
clipart_resized=imresize(clipart,[height,width]);
A_resized=imresize(Alpha,[height,width]);
for i=1:4
fprintf("-----
                                                                     ---- \n",images
                                          -%s-
 H=Hs(:,:,i);
 I=imread(images(i));
 for x=1:height
 for y=1:width
 val=clipart_resized(x,y,:);
 if A_resized(x,y) \sim = 0
X1=[y;x;1];
 X2=H*X1;
 X2=X2/X2(3);
 I(int64(X2(2)), int64(X2(1)),:)=val;
 end
 end
 end
 figure, imshow(I);
 snapnow;
end
```



-----images9.png-----



----images12.png-----images12.png------



-----images20.png-----

