

# Assignment A5: Fundamental Matrix

*CS 6320*  
*Spring 2014*

**Assigned:** 3 February 2014

**Due:** 12 February 2014

For this problem, handin a pdf with the requested discussion and work (include name, date, assignment and class number in pdf), as well as the Matlab code. The code should conform to the style requested in the class materials. (Not a Lab Report!)

Develop a Matlab function to calculate the *Fundamental Matrix*,  $F$ : given a point correspondences from a stereo pair. Validate the code on a stereo pair generated so that you know the correspondences of points not used in the calculation, and show those work with the  $F$  found.

The function specification is:

```
function F = CS6320_F(p_l,p_r)
%
% CS6320_F - find fundamental matrix
% On input:
%   p_l (nx3 array): points from stereo image 1
%   p_r (nx3 array): points from stereo image 2
% On output:
%   F (3x3 matrix): fundamental matrix
% Call:
```

```
%      F = CS6320_F(ps1,ps2);  
% Author:  
%      <Your name>  
%      UU  
%      Spring 2014  
%
```