P.U.R.E. Research Plan Form

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Date: 09/28/2015

Fall 2015 Research Plan

1) Write a brief outline of your research plan:

   Goal: Develop a stereo-based algorithm for regional bird migration. Help ornithologists to collect groundtruth data for radar calibration.

   Steps to achieve the goal:
   1. Prototyping a bird tracking and detection algorithms to measure:
      • Position and velocity of the bird
      • Trajectory of the migration
      • Population of the flock
   2. Prototyping a graphical user interface for annotating
   3. Prototyping a 3-D visualization using the data from bird tracking and detection algorithm
   4. Compare the data computed by our bird tracking algorithm with authentic data from eBird and radar
   5. Refine and optimize the bird tracking and detection algorithm

2) What do you hope to learn and achieve by the end of the semester?

   I hope to learn more about the application of image processing techniques, and also
   learn how to write research paper and using software like Matlab

Mentee Signature: Liming Wang
Date: 9.28.15

Mentor Signature: Jia-Bin Huang
Date: 9.28.15