**Extension Notes:**

The experiments are now running and producing sensible results for the FVI offline case. The FVI online case is still to be done. This may not be sufficient to publish, there is too much overlap with Schlotfeldt 2019. However, this can be extended to grasping using a weighted covariance function. This would fit well as a conference/journal combo?

How to obtain those weights accurately is the most complex part.

**Initial Experiment:**

Applying the AP FVI framework from Atanasov 2015 with the camera model in Schlotfeldt 2019 to a fruit harvesting problem which introduces the additional details:

* Paths are constrained to finish at the target estimate
* Sensor is a camera with pose states
* Splitting out orientation, and constraining the action set to

**Possible Extensions:**

* Incorporating obscuration models
* Incorporating the probability that detections fail at certain poses
* Covariance matching for grasping
* Testing new cost functions
  + Grab after Sigma threshold is reached
  + Minimise weighted combo of distance and uncertainty