## Probability Map Overview

(In progress still)

## General Overview

## Input

Pull Object Detections Pull In our own robot information

Pull In target info

Core Interface (through Xtables)

Send Highest Object Coords Send Goal Robot Movement Vector

Calculations/Processing

Given new Detections calculate which previous object it matches and give it that label

Pass new detections through kalman filter(UKF) once labeled and get new state predictions Map Internals

Manipulate Probmaps (Adding detections / Finding highest prob etc) **Data Persistence** 

Caching Previous kalman Data with Labels

Store Current/ Previous Map Views

Output

Store Predictions (Not in map)

Given map Predictions, pathfind fastest way to target

Path Planning

Lock on to a target

## Data flow example #1 robot predictions

