

# ROS Structure

## Camera Nodes (parameterizable)

- Take in image data from assigned camera
- Get machine learning data from Camera (relative)
- Run SLAM individually in this node
- **Parameters:** JSON File with Camera information {Camera ID, Intrinsics, Location}
- **Publishes Data:** Object locations (absolute), Location estimate

## Combiner Node

- Uses GSTAM to combine data from all nodes
- **Subscribed** to [Network Tables Node Publisher](#) and each publisher from the [Camera Nodes](#)
- **Publish** current estimates of location, velocity, acceleration. Rotational & translational.
- **Service** that gives best estimate of rotational and translational position

## Network Tables Node

- Has a service that sends information to Network Tables
- Has a **publisher** that publishes information from Network Tables: Odometry, Accelerometer