





IEEE RAS Winter School on SLAM in Deformable environments

SLAM on Victoria Park Dataset

Group 7a: SLAM_!!

Group Members:

- 1. Andrew Fishberg fishberg@mit.edu
- 2. Calvin Chua calvinmx.chua@gmail.com
- 3. **Joshua Liu** joshua19970320@gmail.com
- 4. **Kyungho Park** kyungho@hksecurity.net
- 5. Soham Kulkarni ee19btech11053@iith.ac.in



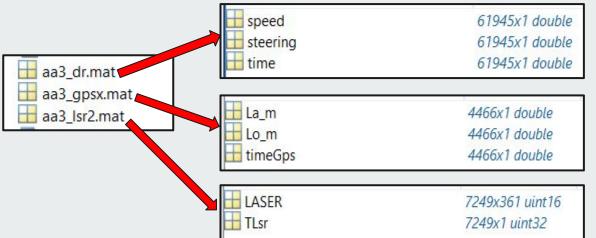




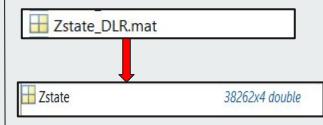


Executing SLAM

Inputs for EKF based SLAM speed steering



Input for Optimization based **SLAM**









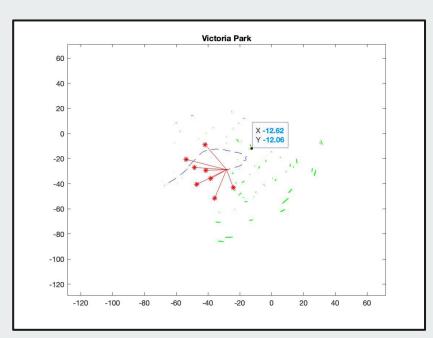


Fig. 1. Running EKF SLAM on the Victoria Park Dataset

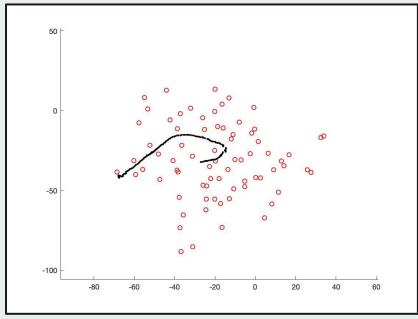


Fig. 2. Running Least squares optimization based SLAM







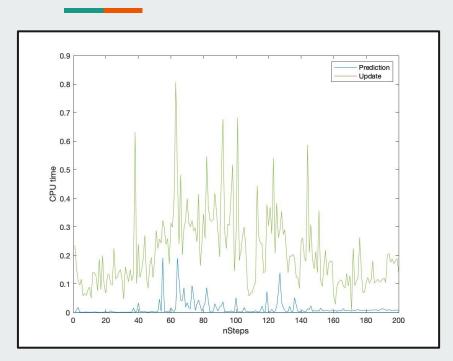


Fig. 3. CPU Runtime graph

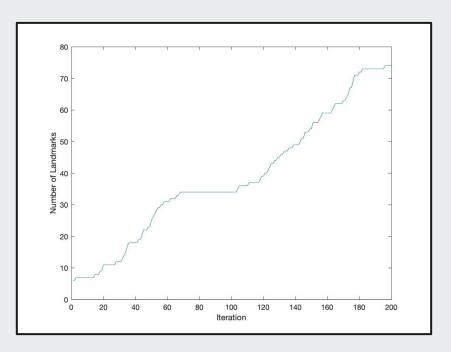


Fig. 1. # Landmark Observations encountered







Evaluating the Landmark Diameter

File := detectTrees16.m



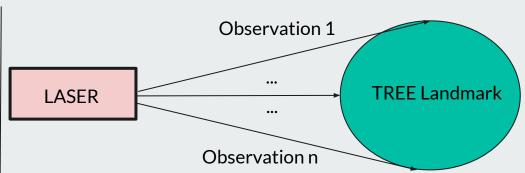


Fig. 5. Uniform weighted average distance over observations







Thank you.

