Automated Extraction of Crosswalk from High-resolution Images

Luciano Lalika,
Thobias Sando, PhD., P.E., PTOE.
University of North Florida
College of Computing, Engineering & Construction
Jacksonville, FL USA 32224

Background

- Pedestrian crossing data are crucial in addressing pedestrians safety issues in roadway intersections

Study Motivation

Problem

- Agencies extract geometric information from images visually and manually
- Manual data extraction is time-consuming, costly, and prone to errors

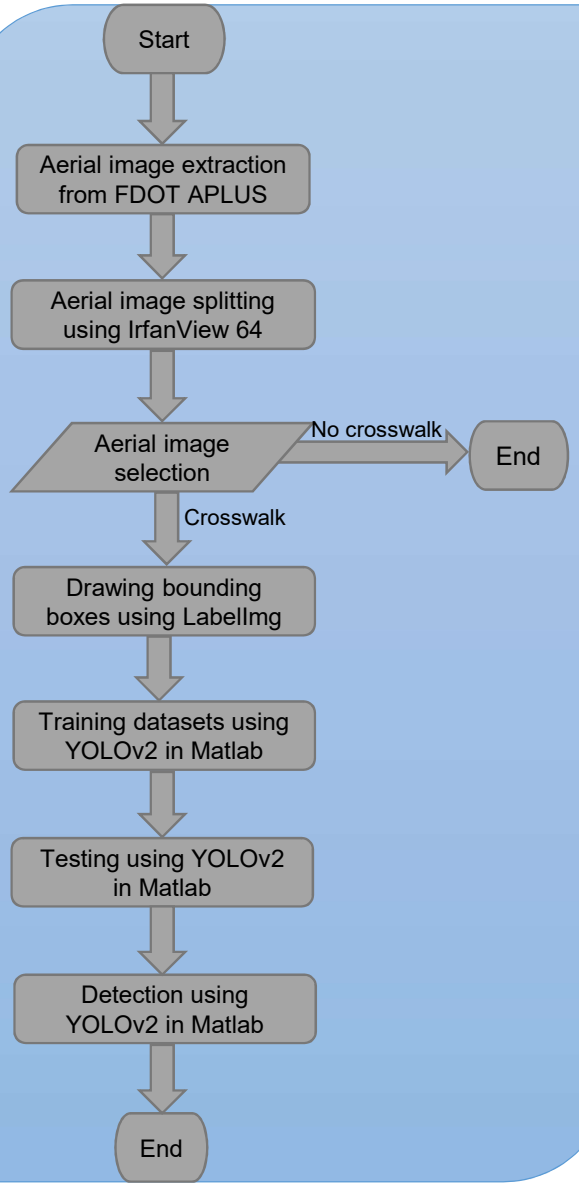
Objective

- This study aims to develop an automated pedestrian crossing data extraction algorithm based on high-resolution images in order to identify crosswalks and mid-block crosswalks on roadway intersections

Study Location

- The study area includes a number of intersections on Jacksonville and Tallahassee roadway intersections

Methodology



Conclusion

- This presentation discusses the framework of the automatic pedestrian crossing data extraction process starting with the data collection, processing, analysis and evaluation of the results