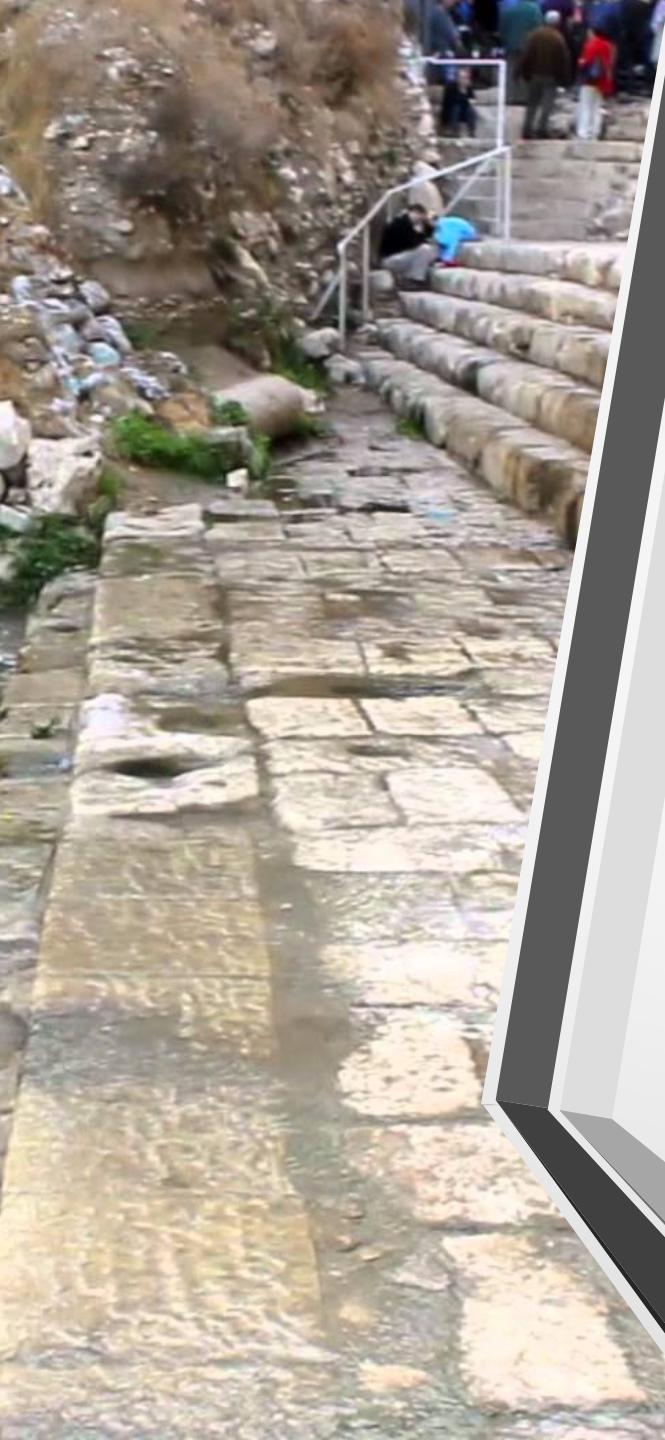


# Creating a Geospatial Macro Level Feature Database

A Proposal

Jason Brewer





# Summary of Proposal

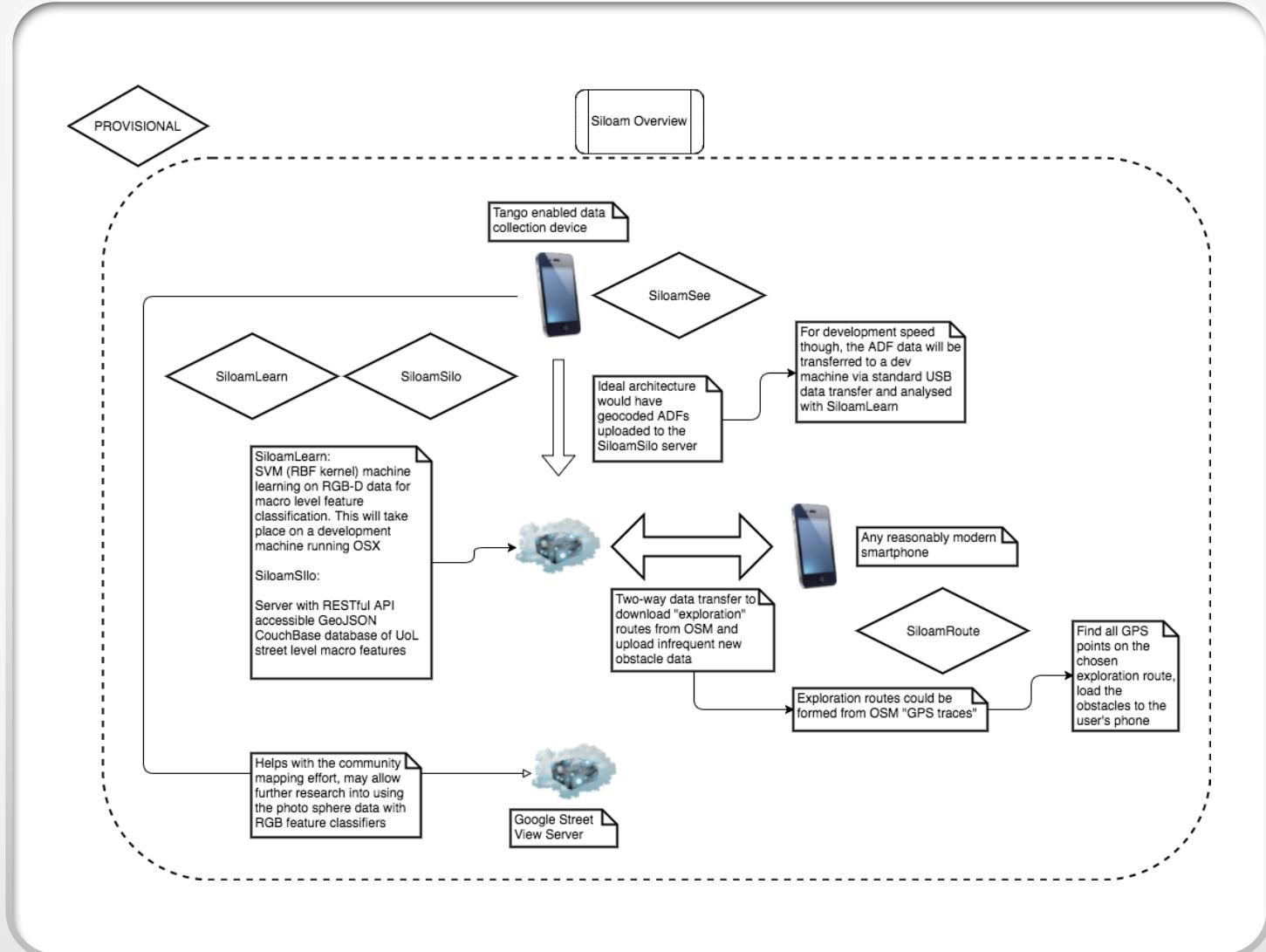
- Project aims to form a standard to collect data to form macro level feature databases of outdoor areas
- Goal of increasing the quality of life for blind or visually impaired users (BoVI) by helping them to explore unfamiliar areas with confidence
- Achieved through a combination of cutting edge sensor technology, machine learning and modern database design
- We call it “Siloam”



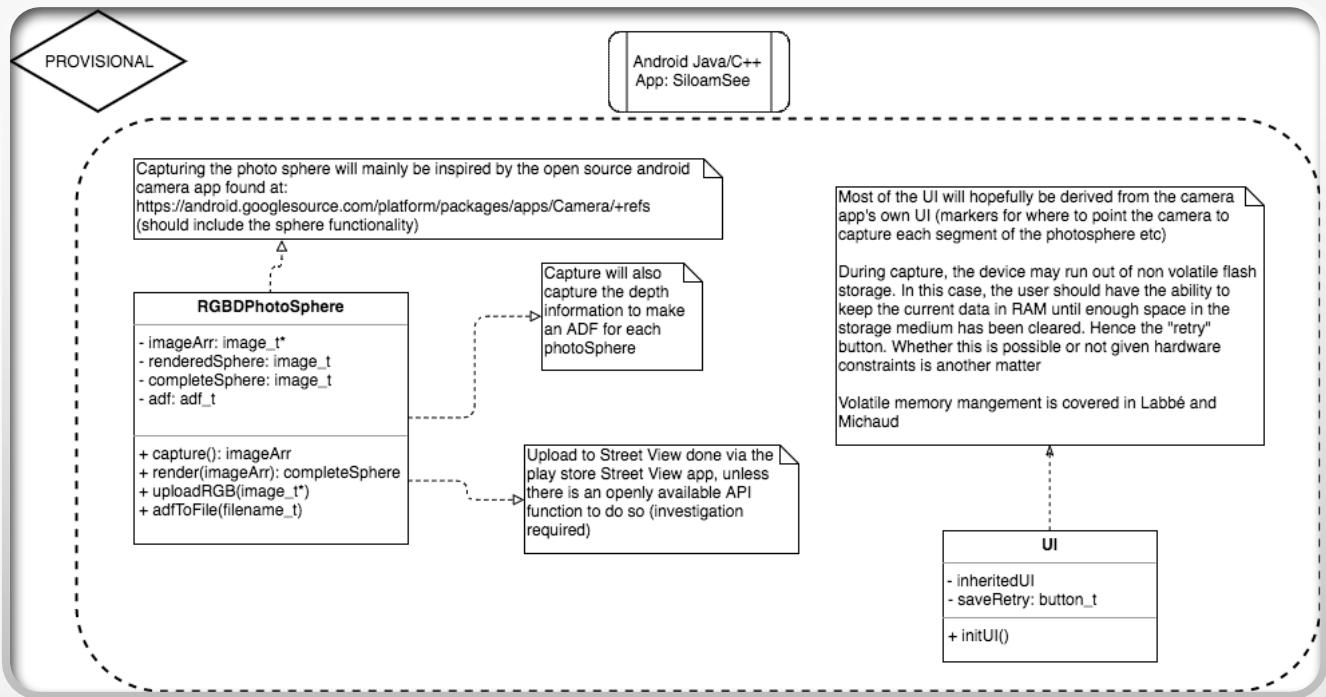
# State of the art

- Many modern methods focus on deep convolutional neural networks and other highly parallelised methods
- But these require specialist hardware
- Not available for this project!
- And does not make further research accessible for the wider community
- But it is still important to keep the system extensible...

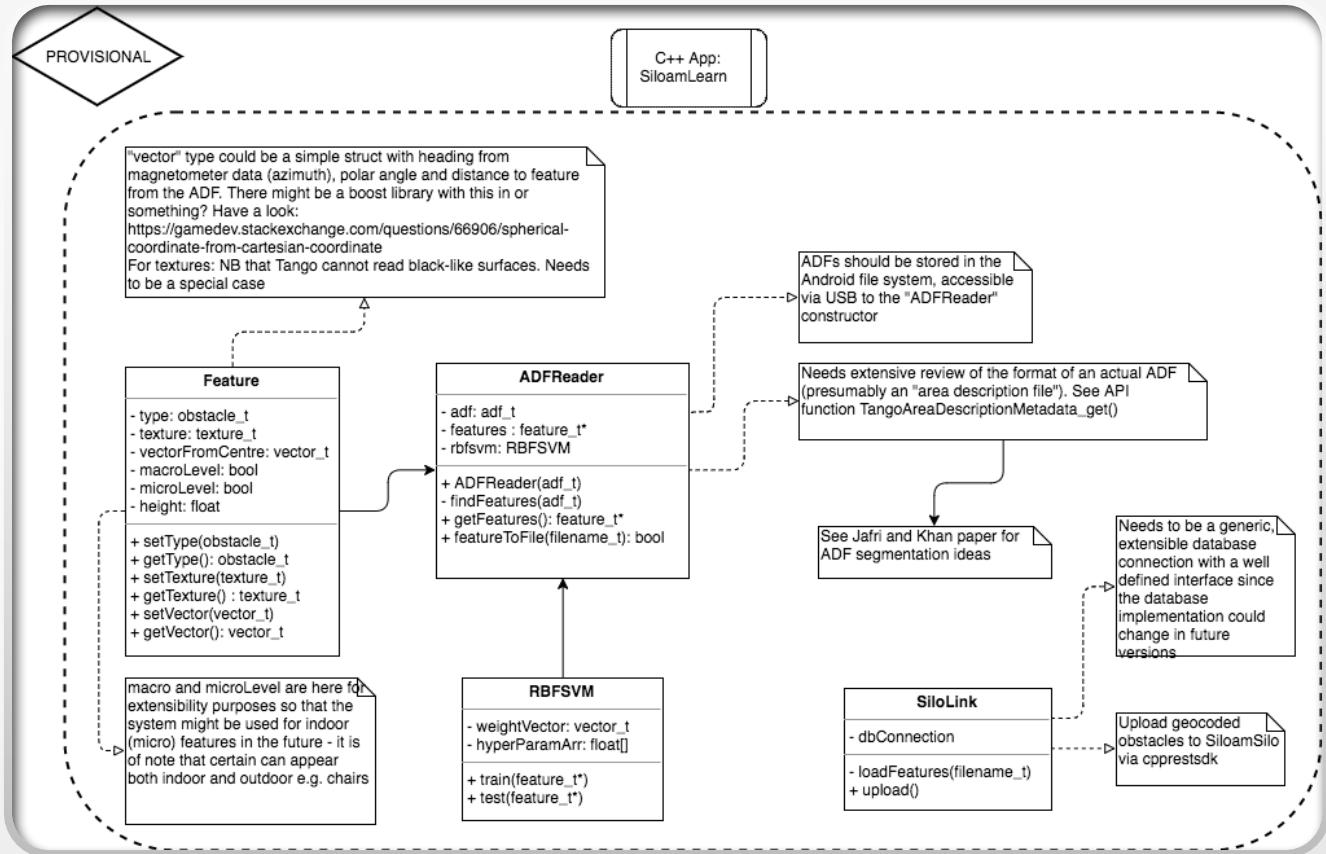
# Overview



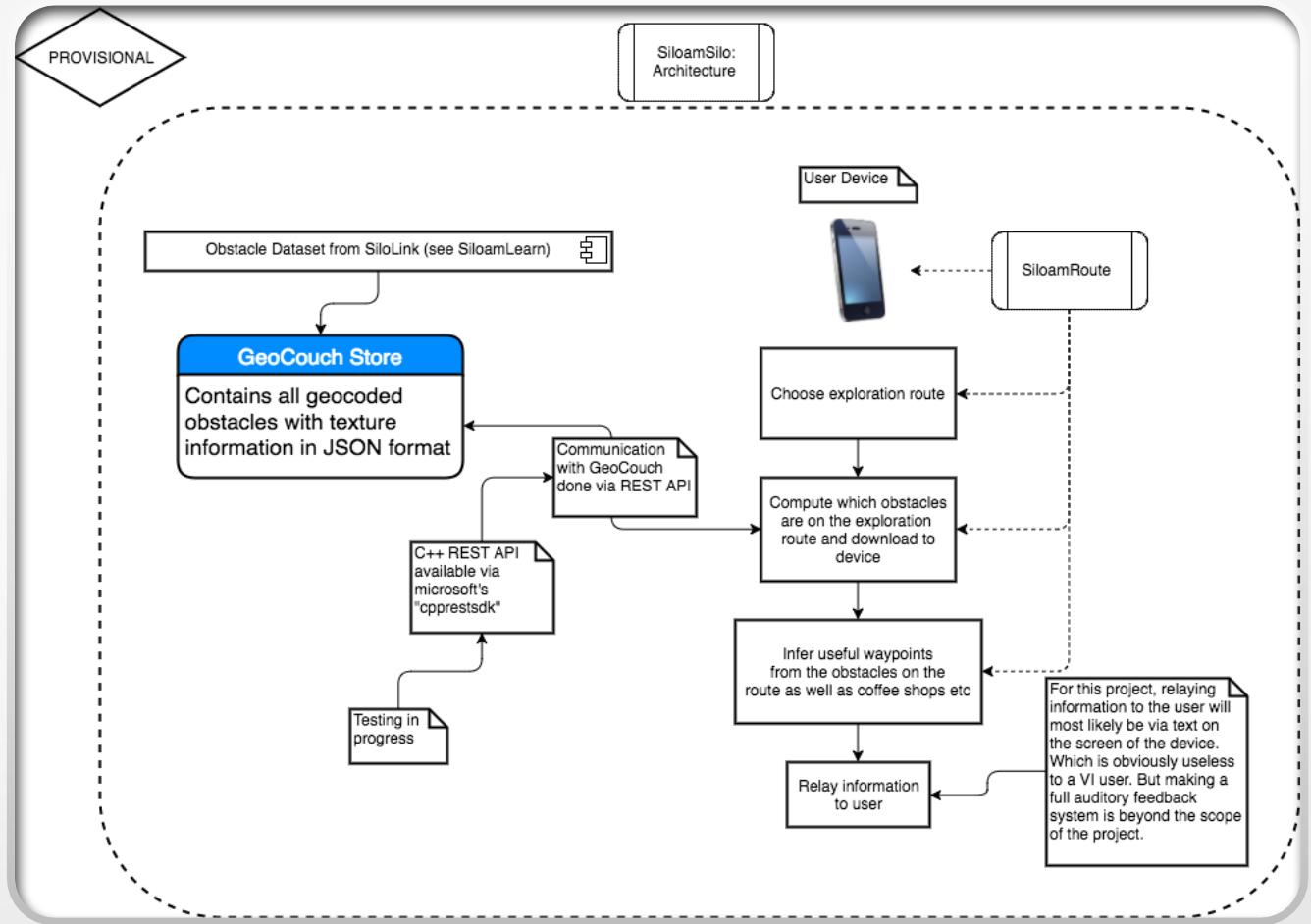
# SiloamSee



# SiloamLearn



# SiloamSilo



# Evaluation

- Based around training routes and test routes for the SVM
- A “ground truth” route will also be annotated by hand



- Train areas are in red
- Test routes are in blue

# Plan

