## Allen Nguyen

Port of Japanese Friendship Garden Android app Haiku Hunt into iOS

Update for July 16th Week 3

Prime internship in Osaka, Japan

In collaboration with BPOC, PRIME, NICT, ISID, & Japanese Friendship Garden

## Project Overview

- Deployment of iBeacons on iOS platform
  - Two main objectives
    - 1.) Port Android Haiku Hunt application written by Jesus Rios of PRIME 2013 onto iOS
    - 2.) Map user location using iBeacons
      - Possible future uses:
        - Delivering data to users when they reach a certain location
        - Monitoring user location

### Progress for This Week

- Tried different tweaks to improve the reliability of the iBeacon distancing; does not seem to improve results
  - Clustering multiple iBeacons at the same spot
  - Placing the iBeacons high above to reduce potential interfering obstacles
- Attempted to use Levenberg-Marquardt algorithm to estimate a location; so far, it works better than trilateration.

#### Plans for Next Week

- See if more iBeacons can be acquired for testing
- Toda-san/iSiD visiting VisLab on Friday, and has something new to show regarding iBeacons. Maybe helpful for location mapping purposes?
- Continue attempts to improve location/distancing accuracy

# Cultural Appreciation



Tower at Shinsekai

## Acknowledgements

- Dr. Jason Haga & Vivian Haga
- Dr. Shinji Shimojo
- Tomoaki Takata
- PRIME Dr. Gabriele Wienhausen (PI), Teri Simas, Jim Galvin, Madhvi Acharya
- PRIME alumna Haley Hunter-Zinck
- NICT
- ISID
- BPOC
- Japanese Friendship Garden
- National Science Foundation