

**Hardware/Software Codesign for Wireless Systems**

**Problem Set 1**

Harris

### Geocache Exercise

A geocache is a small waterproof hidden container whose coordinates are published. The container often contains “treasure” of some sort. Geocaching is a popular new sport involving searching for geocaches.

The Claremont Colleges have ten geocaches distributed around the campus. (Thank so Warren Roberts and the Claremont Libraries staff who prepared the caches.) Each one contains some stickers. The objective of this problem set is to become familiar with GPS operation by tracking down at least 5 of these caches. Take one sticker from each cache and put it by the coordinate to prove that you found the cache.

Do your hunting in teams of two. Prof. Harris has two GPS units that can be loaned out, or you can use your own if you have one. Please use and return loaner units promptly so that other teams have access. Turn them off when you are done to save the battery, and take good care of the units. Trade off so that each person on the team is the primary GPS user for at least two of the stickers. Turn in this page with at least five stickers that your team has found. If you find nine or more of the caches, you will get a point of extra credit and a fun workout.

#	note	Latitude DD	Longitude DD	latitude DMS	Longitude DMS
1	Light Globe at base	34.102889855	-117.712574100	34 6.1733913 N	-117 42.754446 W
2	Stinky Carob (dig your hand in the hole)	34.104008674	-117.710954313	34 6.24052044 N	-117 42.65725878 W
3	ouch .. Watch out for agave	34.104915420	-117.705426617	34 6.2949252 N	-117 42.32559702 W
4	jump up and down you'll make a noise metal plate	34.101707385	-117.706961433	34 6.1024431 N	-117 42.41768598 W
5	base of oak in parking lot (tree tag 1921)	34.100531462	-117.709501010	34 6.03188772 N	-117 42.5700606 W
6	Oak - Face stage on left (tree tag 2347 & look at base)	34.097225958	-117.7093892	34 5.83355748 N	-117 42.56334 W
7	Oak (tree tag 2014) climb up!	34.095285788	-117.708597430	34 5.71714728 N	-117 42.5158458 W
8	Visitor & Home	34.095106389	-117.714560269	34 5.70638334 N	-117 42.87361614 W
9	Huge Camphor Tree (Tag 1069)	34.097940095	-117.714678931	34 5.8764057 N	-117 42.88073586 W
10	Face entry ... behind low wall on left	34.102699598	-117.714586474	34 6.16197588 N	-117 42.87518844 W

# Geocache Boundary

