FUNG INSTITUTE
for ENGINEERING LEADERSHIP
UC BERKELEY COLLEGE OF ENGINEERING

If selected for the 2013-2014 Capstone Project Portfolio you will be responsible for sponsoring and adhering to the terms you outline below. **As the Capstone Sponsor, please *initial* the following requirements by which you are agreeing to the following:**

AD Provide a point person from your organization to advise the capstone team on a regular basis and throughout the whole duration of the project

AD Supply all necessary tools, software, and/or data necessary to do the project in a timely manner

AD Ensure the project has achievable deliverables that fit into a 9-month timeframe

AD Provide clear objectives for both the technical and business-related challenges of the project

By signing below you are indicating that you completed this form to the best of your knowledge and are agreeing to all the requirements of UC Berkeley's Capstone Project Program as listed above.

We look forward to working with you!

Name: ANIL DAGAR Title: Director Engineering

Email: adagar@qualcomm.com Phone: (858) 658-1643

Signature or Initials: Anil Dagar

Date: 05/01/13

Questions? Contact Beth Hoch hoch@berkeley.edu or 510-664-4587

Proposal Form (please complete all sections):

Project Title	Apps/User Experience Kits for Smartphones for Qualcomm Location Technologies
Industry Partner Company Name, Department, and Website	Qualcomm Atheros, Location Tech Dept (Izat) http://www.qca.qualcomm.com/technology/brand.php?brand=9 http://www.qualcomm.com/chipsets/izat
Problem (Describe the industry problem your project addresses in 100 words or less.)	Demonstrate and showcase benefits of location technologies like Precise Indoor Positioning, Sensor Assisted Positioning on Smartphones using Android Apps and/or other simple User Experience Kits
Technical Challenge (Highlight the technical challenge of the problem in 100 words or less)	Developing apps, user experience kits that are simple to use, portable, and test sceanrios that easily demonstrate the benefit of Qualcomm's location technologies to any smartphone user who is not interested in looking at statistics or numbers.
Objective (In 100 words or less, use bullet format and ensure objective is practical for a 9 month project)	1. Understand underlying technologies, archtitecture 2. Come up with ideas on apps, user experience kits to demonstrate the benefit/use of these technologies 3. Develop/implement Android apps and user experience kits using Qualcomm indoor and sensor assisted location technologies
Project Illustration (Optional) Include websites, videos, diagrams or images to help students understand your project	Some initial information on websites below http://www.qualcomm.com/media/releases/2012/11/15/qualcomm-atheros-and-cisco-announce-indoor-location-technology http://gigaom.com/2012/11/15/qualcomm-tackles-indoor-location-with-new-generation-of-chips/

Open or Closed Model – Please check one: Open Model (Public collaborative and may use university lab equipment) or Closed Model (Virtual internship, private, with faculty liaison) * Please list the necessary equipment, software or data that is needed and will be provided to the team.	Please select one and clearly outline what, if any, resources will be provided: ___Open Model/Public collaborative **Tools and Equipment that will be provided include:** ✓ Closed Model/Virtual internship **Tools and Equipment that will be provided include:** **Access to Qualcomm tools, software, APIs needed for the project**
Ideal Team Size (We prefer teams of 4 students, unless otherwise specified)	2-3
Departments Accepted (Choose from CEE, EECS, IEOR, ME, MSE, NE. Indicate ideal team makeup and technical concentrations desired, i.e. "1 CEE ; 1 EECS; 2 IEOR")	*Please indicate your ideal team makeup by specifying the technical concentrations desired.* BIOE= Bioengineering General Program CEE = Civil & Environmental Engineering EECS = Electrical Engineering & Computer Science IEOR = Industrial Engineering & Operations Research MSE = Materials Science & Engineering ME = Mechanical Engineering NE = Nuclear Engineering *2-3 EECS*
Specific Skills Required (i.e. *C/C++/C#, Python ,CAD, Robot Kinematics, MATLAB, Excel Financial Modeling, etc.*) The more detail provided here the better team match you will receive.	C/C++/Java
Coursework (Indicate any recommended/required prerequisite/co-requisite classes)	
Industry Advisor(s) Name, Email, Phone Number *If this is a closed model an Industry Point Person from your	Anil Dagar, adagar@qualcomm.com (858)658-1643

organization is required for the duration of the project and must be available to advise the team on a regular basis and provide all necessary resources	
Faculty Advisor(s) or Academic Liaison Name, Department, and Email *If this is an open model the Faculty Advisor or Academic Liaison is the primary party responsible for the advising and guidance of the capstone team, including providing all the necessary resources	