FUNG INSTITUTE
for ENGINEERING LEADERSHIP
UC BERKELEY COLLEGE OF ENGINEERING

2013-2014 UC Berkeley Master of Engineering Capstone Project Proposal

Overview:
The Capstone Project, a 5-unit Maser of Engineering course requirement, integrates core leadership coursework with a student's engineering concentration. Capstone Project teams range from three to five students, drawn from the cross-disciplinary engineering cohort, to apply diverse knowledge and skills to actual industry problems, identified by faculty or industry partners. The Fung Institute for Engineering Leadership within the College of Engineering provides capstone cohort support and curriculum integration.

Capstone Sponsor Information:
Please read the following instructions and requirements before submitting your proposal. In order to be considered, this document must be completed in full. By submitting this proposal, you agree to its inclusion in the *UC Berkeley Master of Engineering Capstone Project Portfolio* for the 2013-14 Academic Year. Use of links, diagrams and images to illustrate your project is encouraged. Example projects can be found here:
http://funginstitute.berkeley.edu/programs/capstone-projects

Timeline for submission and important deadlines:

Year	Dates	Activity
2013	March	**Capstone Project Call for Proposals**
	By April 1	Submit a one-sentence description of your project idea.
	By May 1	**Full Project Proposals due** Please use the proposal form supplied.
	May-July	**Proposal Review –** screening for skill set and objective fit with incoming M.Eng. class**.**
	July-August	**Student Project Exploration** Industry advisors should be available for questions and interview screening of students during this time.
	August 12-31	**Capstone Team Selection Process, Sponsor and Faculty office hours**
	September 1-12	**Capstone Final Match:** Notification no later than Sept 12
	Early December	**Fall Student Poster Session**
2014	Early May	**Spring Student Poster Session**
	May 1-17	**Final Student Presentations and Deliverables** to Industry & Faculty Advisors

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:**

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

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

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

KY 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: Kevin Yien Title: Customer & Product Development

Email: kevin@launchpadcentral.com Phone: (415) 735 - 5524

Signature or Initials: 

Date: 04/30/2013

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

FUNG INSTITUTE
for ENGINEERING LEADERSHIP
UC BERKELEY COLLEGE OF ENGINEERING

Proposal Form (please complete all sections):

Project Title	Startup Failure Analysis Platform
Industry Partner Company Name, Department, and Website	LaunchPad Central (launchpadcentral.com)
Problem (Describe the industry problem your project addresses in 100 words or less.)	9 in 10 startups fail today. Billions in tax dollars and venture capital go to waste by placing bets on ideas that have no product/market fit.
Technical Challenge (Highlight the technical challenge of the problem in 100 words or less)	We are collecting a lot of structured and unstructured data on early stage ventures. Now we need to analyze it and extract key patterns or signals on what causes startups to fail. This will require standard statistical analysis, natural language processing, machine learning, and data visualization.
Objective (In 100 words or less, use bullet format and ensure objective is practical for a 9 month project)	• Perform data analysis on large unstructured data set • Build visualization tool for data set • Determine key success criteria for early stage ventures
Project Illustration (Optional) Include websites, videos, diagrams or images to help students understand your project	• We are using Steve Blanks Lean LaunchPad methodology as the framework to help startups fail less. Anyone wishing to join this project should familiarize themselves with this methodology. There is a free Udacity course available online at - https://www.udacity.com/course/ep245 • We enjoy visualization platforms such as Trulia's Trends - http://trends.truliablog.com/vis/pricerange-boston/

FUNG INSTITUTE
for ENGINEERING LEADERSHIP
UC BERKELEY COLLEGE OF ENGINEERING

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:** _X_Closed Model/Virtual internship **Tools and Equipment that will be provided include:** Licenses to any software required to run requested analyses by company.
Ideal Team Size (We prefer teams of 4 students, unless otherwise specified)	
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.* 3 (4) EECS = Electrical Engineering & Computer Science 1 (0) IEOR = Industrial Engineering & Operations Research
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.	• MySQL • PHP • R/Matlab • Javascript • Git
Coursework (Indicate any recommended/required prerequisite/co-requisite classes)	• Machine Learning • Data Visualization • Information Design
Industry Advisor(s) Name, Email, Phone Number *If this is a closed model an Industry Point Person from your 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	Kevin Yien kevin@launchpadcentral.com (415) 725 - 5524
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	