**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:**

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| --- | --- | --- |
| **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 |

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:**

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

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

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

ML 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: Misha Leybovich Title: Founder and CEO

Email: misha.leybovich@meograph.com Phone: 415-617-9404

Signature or Initials: ML

Date: 4/25/13

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

**Proposal Form (please complete all sections):**

|  |  |
| --- | --- |
| **Project Title** | Building future multimedia formats |
| **Industry Partner**  Company Name, Department, and Website | Meograph, www.meograph.com |
| **Problem**  (Describe the industry problem your project addresses in 100 words or less.) | **Meograph is building the next generation of creative tools, democratizing the creation of rich, interactive multimedia. This helps both consumers who wish to better express themselves in an increasingly visual and digital world as well as companies who greatly benefit when they can get their customers engaged in creating content.** |
| **Technical Challenge**  (Highlight the technical challenge of the problem in 100 words or less) | We are building the next generation of multimedia formats. We have architected our system to store and serve multimedia in a multilayered rather than flat format, allowing for all sorts of possibilities in interactivity, consumption analytics, updating anytime, deep search, and content remixing that no other kind of media can do. |
| **Objective**  (In 100 words or less, use bullet format and ensure objective is practical for a 9 month project) | **We are looking for help in developing those capabilities: creating the next generation of how users can create, and audiences can interact with rich multimedia. We will explore features in:**  **1) New forms of interactivity from audiences while consuming**  **2) How to help content creators best understand how their audiences are consuming their content**  **3) New capabilities in allowing creators to update their content anytime and keep their audiences notified of those changes**  **4) Innovative search interfaces and visualizations for this granularized media**  **5) New forms of multimedia content remixing and collaboration**  **We also can use help better fleshing out the business cases around these innovative technical capabilities** |
| **Project Illustration (Optional)**  Include websites, videos, diagrams or images to help students understand your project | See (and play with) www.meograph.com |
| **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:**  *Apologies, I don’t really understand this question.* |
| **Ideal Team Size**  (We prefer teams of 4 students, unless otherwise specified) | Between 3-5, no more than 1 non-developer if 3, and up to two non-developers if 5 |
| **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.*  EECS = Electrical Engineering & Computer Science  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. | Our technology stack is Ruby on Rails, CoffeeScript, Haml, and Sass. Prior experience would be helpful, but any reasonably good developer will be able to pick up the syntaxes they don’t know quickly. |
| **Coursework**  (Indicate any recommended/required prerequisite/co-requisite classes) | n/a |
| **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 | Misha Leybovich  misha.leybovich@meograph.com  415-617-9404 |
| **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 | Could use help picking a good advisor. Would of course love to work with Lee Fleming again, but this one will be more development-focused so not sure if we want someone in EECS. |