

Capstone Project Information Sessions Aug 12-21, 2013

#	Host Dept.	Team Size: Depts. Accepted	Project Title	Fac / Ind Lead	Faculty Sponsor	Company	Industry Sponsor	INFO SESSION	Location	AUG 20 NETWORKING	AUG 20 presentation in 100AB Blum
1	EECS	4: EECS, IEOB, ME	3D printed implants for precision HDR Brachytherapy for cancer treatment	FAC	Ken Goldberg, Animesh Garg			Aug 12, 5:00-5:45pm	100AB Blum		
15	ME	4: BIOE, EECS, ME	Design and Control of the Bionics Hip	FAC	Homayoon Kazerooni	Mitsubishi		Aug 12, 5:00-5:45pm	230 Blum		
16	ME	4: BIOE, EECS, ME	Design and Control of the Bionics Knee	FAC	Homayoon Kazerooni	Mitsubishi		Aug 12, 5:00-5:45pm	230 Blum		
30	EECS, ME	4: EECS 2, ME 1-2, CEE, IEOB, MSE	In-field monitoring for CO2 enhanced oil recovery	IND		C12 Energy, Engineering Dept.	Tom Hunt	Aug 12, 5:00-5:45pm	130F Blum		
62	IEOB	3-4: IEOB (2 teams)	The Indian Health Kiosk Project	IND	Donald Wroblewski	IIT Kharagpur & all industry partners associated with this project.	Prof. Dhruves Biswas	Aug 13 1:30 & Aug 14 9am Drop-In Q&A	203 McLaughlin	Aug 20, 5-7pm & presentation	5:25pm
48	IEOB	3-4: IEOB	Realtime streaming analytics	IND	Donald Wroblewski	GE Software Systems	Alok Batra	Aug 13 1:30 & Aug 14 9am Drop-In Q&A	203 McLaughlin		
52	IEOB	3-4: IEOB/EECS	Security and Risk Analysis at Yahoo: 3 projects	IND	Don Wroblewski	Yahoo, Identity Management	Balasubrahmanyam Chaturvedula	Aug 13 1:30 & Aug 14 9am Drop-In Q&A	203 McLaughlin		
36	EECS	4: EECS	Methods for capturing and analyzing data from paper receipts	IND		Intuit, Technology Innovation Group	Bill Laaser, Tony Chang, Claude Keswani	Aug 13, 12:30-1:20 panel (Tony Chang)	130F Blum	Aug 20, 5-7pm (Bill Laaser, Claude Keswani)	
40	EECS	4: EECS 3, ME, BIOE	New user interaction methods with desktop and mobile software applications	IND		Intuit, Technology Innovation Group	Bill Laaser, Tony Chang, Claude Keswani	Aug 13, 12:30-1:20 panel (Tony Chang)	130F Blum	Aug 20, 5-7pm (Bill Laaser, Claude Keswani)	
63	IEOB	3-4: IEOB	Vehicle Data Science, Inc.	IND		Novavia Solutions	JD Margulici	Aug 14, 9:00-9:45am	130F Blum	Aug 20, 5-7pm	
42	EECS	4: EECS 2, IEOB 2	Next Generation Financial Guidance Experience & Tools: Gamified & Data Driven	IND		Fidelity Investments	Amanda Chiu	Aug 14, 9:45-10:30am	100AB Blum		
17	ME	4: ME 2, IEOB 1, EECS 1	Design and Manufacture of Sustainable Production Systems and Consumer Products	FAC	David Dornfeld, Margot Hutchins, Moneer Helu	Samsung Electronics, Product Innovation Team	Andrew Chang	Aug 14, 9:45-10:30am (Hutchins)	100AB Blum		
39	EECS, IEOB	3-4: EECS, IEOB	NetApp Internship Project Proposals (5 projects)	IND		NetApp	Manjunath Mittha	Aug 14, 12:50-1:20pm	100AB Blum	Aug 20, 5-7pm (Sreejith M., Shubhvardhan)	
64	EECS	4: EECS 1-3, ME, IEOB, MSE, NE	Wearable Augmented Reality (AR) technology enablers (5 projects)	IND	Avideh Zakor (potential)	ARCortex	Yohan Baillot	Aug 14, 12:50-1:20pm	130F Blum	Aug 20, 5-7pm & presentation	6:25pm
22	IEOB	4: BIOE1, EECS 2, ME 1	Diagnosing Heart Conditions Using Cloud Based Audio Analysis	FAC	Ikhlaq Sidhu	Eko Devices	Connor Landgraf	Aug 14, 5:30-6:15pm	100AB Blum	Aug 20, 5-7pm	
27	EECS, ME	5: EECS, ME	Humanoid Robot Subsystems (5 projects)	IND		Bay Area IP Group, LLC, Research Lab	Ariel S. Bentolila	Aug 14, 5:30-6:15pm	130F Blum	Aug 20, 5-7pm	
32	ME	3-4: ME 1, IEOB 1, EECS, CEE	Industrial Energy Management	FAC	David Dornfeld, Moneer Helu	System Insights Inc.	Athulan Vijayaraghavan	Aug 14, 5:30-6:15pm (Helu)	230 Blum		
2	EECS	4: EECS	A best practices/technical solution to provide offline support for HTML5 apps	IND		Mozilla Corp.	Didem Ersoz	Aug 15, 5:00-5:45pm	Webinar	Aug 20, 5-7pm & presentation	6:15pm
3	EECS	4: EECS	A Firefox OS App that will leverage device hardware capabilities	IND		Mozilla Corp.	Didem Ersoz	Aug 15, 5:00-5:45pm	Webinar	Aug 20, 5-7pm & presentation	6:15pm
14	EECS	4: EECS	Crowdsourcing of traffic monitoring and accident reduction/prevention using smart phones	FAC	Avideh Zakhor	Qualcomm	Faraz Mirzaei	Aug 19, 12:50-1:20pm	130F Blum	Aug 20, 5-7pm	
50	ME	3-4: EECS, ME	Robot Model Generation from CAD to Simulink	IND	Masayoshi Tomizuka, George Anwar	Applied Materials	Alex Minkovich, Jeff Hudgens, Kaushik Mani, Sanggyum Kim	Aug 19, 12:50-1:20pm	100AB Blum	Aug 20, 5-7pm & presentation	6:05pm
45	BIOE	4: BIOE/MSE 2, EECS 2	Phage-based E-NOSE sensor matrices for Smart Phone	FAC	Seung-Wuk Lee			Aug 19, 12:50-1:20pm	230 Blum		
43	BIOE	4: BIOE 2, EECS, IEOB	Ocular CellScope: Diagnosing eye diseases with a mobile phone	FAC	Daniel Fletcher, Franki Myers	Margolis Lab, UCSF, Dept. Ophthalmology	Todd Margolis	Aug 19, 5:00-5:45pm	130F Blum	Aug 20, 5-7pm	
18	ME	4: CEE 1-3, ME 1-3, EECS 0-1, IEOB 0-2	Design for Sustainability Guide Based on Life-Cycle Assessment	FAC	Alice Agogino	Autodesk, Sustainability Education Program	Adam Menter, Allan Velzy, Eric Munsing	Aug 19, 5:00-5:45pm (Jeremy Faludi)	230 Blum		

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46	BIOE	3: BIOE, EECS, ME, IEO	Point-of-care diagnostics for global health	FAC	Amy E. Herr/Robert Lin			Aug 19, 5:00-5:45pm (Robert Lin)	100AB Blum	Aug 20, 5-7pm & presentation (Amy Herr)	5:15pm
13	ME	3: CEE, EECS, ME	Creating a Noise Map for the City of Berkeley and Studying Large-Scale Urban Noise Mitigation Techniques	FAC	Reza Alam	City of Berkeley (tentative)		Aug 20, 12:50-1:20pm	130F Blum	Aug 20, 5-7pm	
19	ME	4: EECS 1, MSE 1, ME 2	Design of a commercially viable kinetic energy storage and recovery unit for efficiency enhancement in consumer electric and hybrid vehicles	FAC	Dennis K. Lieu, Benson H. Tongue	Integrated Manufacturing Group	Allen Timmons	Aug 20, 12:50-1:20pm	230 Blum	Aug 20, 5-7pm	
24	ME	4-5: ME 2, EECS 2	EV Charging Design	IND	Alice Agogino	Mercedes-Benz, R&D	Rasheq Zarif	Aug 20, 12:50-1:20pm	100AB Blum		
41	ME	4-5: ME 2, EECS 2	Next Digital: design a next concept of a digital device with a focus on digital-tangible paper transitions	FAC	Alice Agogino	Samsung Electronics	Anthony Radspieler Jr.	Aug 20, 12:50-1:20pm	100AB Blum		
61	ME	4-5: ME 2, MSE, EECS	Tensegrity Soft Robots for NASA Missions	FAC	Alice Agogino	NASA Ames	Adrian Agogino, Vytas Sunspiral, Jodi Lomask	Aug 20, 12:50-1:20pm	100AB Blum		
23	CEE, ME	3: BIOE, CEE, EECS, IEO, MSE, ME, NE	Drones: The Killer App?	FAC	Raja Sengupta, Karl Hedrick, Pieter Abbeel	3D Robotics	Brandon Basso	Aug 21, 5:00-5:45pm	130F Blum	Aug 20, 5-7pm	
38	BIOE	4: BIOE 2-3, ME, MSE	Nano-Patterned Surgical Mesh for Hernia Repair	FAC	Song Li	NanoNerve, Inc., R&D	Shyam Patel	Aug 21, 5:00-5:45pm	230 Blum	Aug 20, 5-7pm	
7	ME	BIOE, CEE, EECS, IEO, MSE, ME, NE	Assistive technologies for an aging society: promising technologies and applications	FAC	T.I. Zohdi	Siemens Corp., Corporate Technology	Arturo Pizano, Wendelin Feiten	Aug 21, 5:00-5:45pm	100AB Blum		
6	EECS	2-3: EECS	Apps/User Experience Kits for Smartphones for Qualcomm Location Technologies	IND		Qualcomm Atheros, Location Tech Dept.	Anil Dagar			Aug 20, 5-7pm	
29	EECS	4: EECS 3-4, CEE 1	Improve User Experiences in Indoor Navigation with Augmented Reality	IND		InNav Team, Qualcomm Research Silicon Valley	Jiajian Chen			Aug 20, 5-7pm	
47	EECS, IEO, ME	3-5: EECS, IEO, ME	Predictive Analysis using Berkeley Spark framework	IND		Cisco	Nagendra Prahalad, Muni Xu, Shrinivas Deshpande			Aug 20, 5-7pm	
51	ME	3-5: EECS, IEO, ME	Search based application	IND		Cisco	Nagendra Prahalad, Muni Xu, Shrinivas Deshpande			Aug 20, 5-7pm	
58	EECS	4: EECS 3-4, IEO	Startup Failure Analysis Platform	IND	Lee Fleming	LaunchPad Central	Kevin Yien			Aug 20, 5-7pm	
26	NE	4: CEE, EECS, IEO 2, MSE, ME, NE 2	Grid-Integrated Nuclear Power	FAC	Per F. Peterson	Westinghouse Nuclear	Regis Matzie			Aug 20, 5-7pm & presentation	5:55pm
35	CEE	4: CEE	Management of Multimodal Travel Corridors (Phase 2): Demand Management Strategies and Dynamic Mobility Applications (DMA) to Mitigate Congestion	FAC	Alexander Skabardonis	Alameda County Transportation Commission / Hatch Mott MacDonald, Inc.	Raj Murthy			Aug 20, 5-7pm & presentation	5:45pm
60	EECS	3: EECS	Tele-immersion for Physicians	FAC	Ruzena Bajcsy, Gregorij Kurillo	Department of Rehabilitation & Medicine, UC Davis	Jay Han			Aug 20, 5-7pm & presentation	5:35pm
4	BIOE	4: BIOE, MSE, ME	A Novel, Point of Care Low-Cost Approach for HIV Monitoring	FAC	Kevin E. Healy, Wesley M. Jackson, Sylvia Natividad	Biomaterials and Tissue Engineering Laboratory, UCB					
5	ME	3: CEE, ME	An Actuated Seafloor Carpet for Broadband and High-Performance Ocean Wave Energy Conversion	FAC	Reza Alam	American Bureau of Shipping					
8	EECS	4: EECS 3-4, IEO, ME	Augmenting Classroom Projectors with Collaborative Learning Applications	FAC	Bjoern Hartmann	Marvell Semiconductor, Kinoma Software Platform	Andy Carle				
9	IEOR	3-4: IEO, EECS	Big Data; Business Models and Open Innovation	FAC	Lee Fleming						
10	BIOE	4: BIOE 1-3, EECS 1-3, IEO 0-1	Build a Genome Commons Navigator for Interpreting Personal Genomes	FAC	Steven E. Brenner	TATA Consultancy Services, Innovation Laboratories	Rajgopal Srinivasan				
11	EECS	3-5: EECS 2-3, IEO 1-2	Building Future Multimedia Formats	IND		Meograph	Misha Leybovich				

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12	IEOR	3-4: 1-2 EECS, 1-2 IEO, 1 ME (optional)	Communication and Information Sharing in a dynamic Product Organization	IND		Lam Research Corp., Etch Product Group	Linda Braly				
20	ME	4: IEO, ME 3	Design of Low Cost Energy Storage Systems	FAC	Hari Dharan	Quantum Energy Storage Corporation	Tien Nguyen				
21	BIOE	4: BIOE 2, MSE, ME	Develop computationally and experimentally derived predictive tools to estimate functional property of a polymeric implant construct on the self as f(t)	IND	Kevin E. Healy	Abbott Vascular	Syed Hossainy				
25	IEOR	3-4: 1-2 EECS, 2-3 IEO	FastLab: Optimization of Resources, Data Management and Utilization via Software integration, data collection and user interface optimization	IND		Lam Research Corp., Etch Product Group	Linda Braly				
28	ME	4: BIOE, CEE, EECS, IEO, MSE, ME, NE	Ignition System with Microwave Spark Plug for Ultra Lean Combustion	FAC	R.W. Dibble, J.Y. Chen	Honda Performance Development Inc.	Johnny Wall				
33	ME	4: BIOE 1, EECS 2, ME 1	Kinect-based application for clinical assessment of joint function	FAC	Oliver O'Reilly	Dept. of Orthopaedic Surgery, UCSF	Jeffrey Lotz				
34	ME	4: BIOE, CEE, EECS, IEO, MSE, ME, NE	Leak Detection of Natural Gas using Laser Technology	FAC	R.W. Dibble, J.Y. Chen	Searchlight Sensors	Daniel B. Oh				
37	ME	3: BIOE, CEE, EECS, IEO, MSE, ME, NE	Modeling and simulation of industrial energy systems (2-3 Capstones/8 projects)	FAC	Tarek Zohdi	Siemens Energy Group	Marco Brunelli				
44	ME	4-5: BIOE, CEE, EECS, IEO, MSE, ME, NE	Optimal Design of the Shapes of the Leading & Trailing Cars of a High Speed Train	FAC	Philip Marcus	Siemens AG, Industry Sector, Mobility Division	Andreas Gronza				
49	MSE	4: IEO, MSE, ME	Recycling and Reuse of Pre-lithiated Anodes for Li-ion Batteries	FAC	Andrew M. Minor						
53	IEOR	3-4: IEO, all with interest	Simulated Investment Fund and Technology Blindside Strategy Projects - Industry Sector A	FAC	Ikhtlaq Sidhu, Phil Kaminsky, Max Shen, Alper Atamurk	RLF Capital Management	Blake Woodard, Kourosh Zamanizadeh				
54	IEOR	3-4: IEO, all with interest	Simulated Investment Fund and Technology Blindside Strategy Projects - Industry Sector B	FAC	Ikhtlaq Sidhu, Phil Kaminsky, Max Shen, Alper Atamurk	RLF Capital Management	Blake Woodard, Kourosh Zamanizadeh				
55	IEOR	3-4: IEO, all with interest	Simulated Investment Fund and Technology Blindside Strategy Projects - Industry Sector C	FAC	Ikhtlaq Sidhu, Phil Kaminsky, Max Shen, Alper Atamurk	RLF Capital Management	Blake Woodard, Kourosh Zamanizadeh				
56	IEOR	3-4: IEO, all with interest	Simulated Investment Fund and Technology Blindside Strategy Projects - Industry Sector D	FAC	Ikhtlaq Sidhu, Phil Kaminsky, Max Shen, Alper Atamurk	RLF Capital Management	Blake Woodard, Kourosh Zamanizadeh				
57	IEOR	3-4: IEO, all with interest	Simulated Investment Fund and Technology Blindside Strategy Projects - Industry Sector E	FAC	Ikhtlaq Sidhu, Phil Kaminsky, Max Shen, Alper Atamurk	RLF Capital Management	Blake Woodard, Kourosh Zamanizadeh				
59	ME	BIOE, CEE, EECS, IEO, MSE, ME, NE	Strategies of Storing Wind Energy Produced at Off-Peak Hours and Generating Electricity at Peak Hours	FAC	R.W. Dibble, J.Y. Chen	Lawrence Livermore Nat. Lab., Combustion & Alternative Fuels Program	Daniel L. Flowers				