INDUSTRIAL ENGINEERING AND OPERATIONS RESEARCH & OPERATIONS RESEARCH AND MANAGEMENT SCIENCE

Saturday, April 18, 2015

1:00 – 2:00 p.m. | Information Session: IEOR/ORMS majors. The Science of Better
3111 Etcheverry Hall
Professor Phil Kaminsky, Chair of the Department, Professor Robert Leachman, Head Undergraduate Advisor & a panel of students will answer your questions about the programs and student life in these majors.

Learn about both IEOR and ORMS (Operations Research and Management Science) and how students use information technology and mathematical modeling to solve problems. Find out what it takes to be an industrial engineering major.

11 a.m. – 12 p.m. / 1 p.m. – 2 p.m. | The Berkeley Automation Science Lab Open House
1169 Etcheverry Hall
Professor Ken Goldberg and students. Come see the UC Berkeley's Automation Sciences Lab, a center for research in robotics and automation, learn about their current projects in networked telerobotics, computer assisted surgery, automated manufacturing, and new media artforms. http://automation.berkeley.edu

Cloud Robotics: What if robots and automation systems were not limited by onboard computation, memory, or software? Advances in wireless networking and rapidly expanding Internet resources can reduce these limitations. In 2010, James Kuffner at Google introduced the term "Cloud Robotics" to describe a new approach to robotics that takes advantage of the Internet as a resource for massively parallel computation and real time sharing of vast data resources. We are working with Google and other collaborators on several Cloud Robotics research projects.

Computer Assisted Surgery: Come and find out how to improve patient care and more accurately target treatment within the human body. We are developing new geometric models and algorithms for surgical training, planning, and analysis, including fast FEM models of medical intervention in soft tissues, new methods for
dose planning, brachytherapy, new image registration techniques, and new planning algorithms for steering flexible needles.

*Automated Manufacturing*: Visit us to see how to produce the high quality, rapidly evolving products of the future. We are establishing a science base for automated assembly by analyzing its basic components. We develop efficient geometric algorithms for feeding, fixturing, and grasping industrial parts.

*New Media Artforms*: Discover what can be expressed with new technologies such as networks, robots, digital cameras, and sensors that could not previously be expressed. We are designing art installations that explore issues related to privacy, play, embodiment, and "telepistemology": what is knowable at a distance?

11:00p.m. – 2:00p.m. | **Risk Lab & Demonstration**
3113 Etcheverry Hall
Professor Xin Guo and students. Come learn more about the Risk Lab and their projects: High-frequency trading, Credit risk, Nonlinear expectations, and Principal-agent problems.

10am-2pm | **IEOR & ORMS Information Table**
3RD Floor, east entrance, Etcheverry Hall
What’s it like to be an IEOR/ORMS student? Get the scoop on these majors straight from students and staff. They answer your questions and distribute information about the IEOR/ORMS undergraduate programs.
PLUS GAMES and TREATS

9:30am-12:30pm | **IEOR, ORMS, CET Programs Poster Display**
3111 Etcheverry Hall
Provided by Institute of Industrial Engineers, Alpha Pi Mu and the Center for Entrepreneurship & Technology (CET Program)
[www.ieor.berkeley.edu](http://www.ieor.berkeley.edu)