Engineering Leadership Professional Program
Spring 2016 Alumni Mixer

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IEOR Emerging Area Professor Award
Engineering Leadership Professional Program

- Over 5 years
- 8 Cohorts
- 400 Alumni
About US: The Sutardja Center for Entrepreneurship & Technology is the premier hub at UC Berkeley for “technology-centric” innovation and entrepreneurship.
Our projects are at the most current and highly applied edge of the University

- Fundamental Research
- Use-Inspired Research
- Industry Projects

Sutardja Center 2016 #WhatsNext Watch List:

1. Blockchain
2. Meat Alternatives
3. Connected Cars
4. Wearables and patient recovery in healthcare
5. Data + Health
6. Practical Data for Small and Medium Size Businesses
7. 3D printing for healthcare
8. Virtual Reality + Everything
9. Preventing Neurological Disease - We are on the verge.
10. Home Robotics
Teaching in Innovative Areas

What about the current topics and opportunities where the book has not yet been written?
Case Example: Imprint Energy Collider

- Targeted Recruiting
- Changing the Industry Landscape for Wearables with Printable Batteries
Case Example: Venture Funds, Experienced Founders, and Faculty Develop a Berkeley Ecosystem for Blockchain Innovations

Kickoff: March 2, 2015 at 5:00pm
RSVP: http://blockchainCollider.eventbrite.com

Learn about the emerging opportunities at the intersection of finance, security, and cryptography - and win $5000!

Blockchain is the underlying technology behind bitcoin. But forget cryptocurrency, this technology has the potential to change the world as we know it. Marc Andreessen has called Bitcoin and the underlying blockchain technology a “breakthrough in computer science”.

Open to graduate and undergraduate students in engineering, finance, economics, mathematics or others interested in understanding and pursuing opportunities related to blockchain technology. IEOR 190c (CCN 41264) or IEOR 298 (CCN 41177)
1) Forecasting the number of vehicles required for delivering packages is a difficult problem. Too many vehicles creates unnecessary costs, but too few vehicles will cause late deliveries. Given a demand distribution, recommend a range for pay for guaranteed vehicles, option vehicles, and spot vehicles. Propose process for calculating these vehicles.

2) Create a supply/demand matrix. Proposal for available capacity in Amazon’s local network. We have vehicles frequently moving between facilities with available capacity to pick up vendor products (or do work for localities).

- Targeted Recruiting
- Redesigning the Amazon Supply Chain
Ventre Case:
Foundation Capital Collider

New Venture Formation
The Innovation Collider is our new model for Experiential Teaching, Laboratory, and Targeted Recruiting.

Mindset  Experiential Learning

Undergraduate  Innovative Large Firm
Graduate  Innovative Small Firm
Industry  Skydeck
Global Partners  The Foundry

Innovation Collider

Accelerators & Investors

Berkeley Engineering

Sutardja Center for Entrepreneurship & Technology
The Berkeley Method with Mindset & Behaviors
A holistic, journey-based approach to entrepreneurship and innovation

Mindset & Behaviors

Frameworks
Opportunity
MVP
Raising Funds
Business Models

Diversity = Value

When to be “Perfect”

Belief & Ethics

Resilience to Failures

Communication

Stories at Work

Pay It Forward

Information Sharing in Teams

Fair Negotiation

Measuring Risk

Mindset & Behaviors

Networks
Facilities
Services
Mentors
Rules of Engagement
A Question to Psychology Ph.D Student Jan Pries:

Which of the BMoE Behaviors can be measured in Psychology?
Berkeley Innovation Index – A Global Project

- Innovation Mindset: Personal
- Innovation in Organization by people, processes, and culture
  - By function
  - By social graph
- Diagnostics and index
• Same group, similar answer
• Some questions are too similar
• Negative correlation of perfection
• QP1 and belief questions
• EP, CZ and QB2 correlate most with ER

LASSO Regression
We can now measure students before and after a class and they can see how their attitudes have changed.
Innovation Mindset Scores: Pre, Mid, and Post BMoE Bootcamp
INNOVATION MINDSET
Your work group’s average Innovation Index Score is 5.99 out of 10*

Factors of your Innovation Mindset
TRUST (Tru) 6.32 out of 10. (Ability to trust others and gain trust)
RESILIENCE (Res) 5.48 out of 10. (Ability to overcome failure)
DIVERSITY (Div) 5.72 out of 10. (Ability to overcome social barriers)
MENTAL STRENGTH (Ment Str) 6.38 out of 10. (Confidence and belief that you can succeed)
COLLABORATION (Colab) 6.16 out of 10. (Ability to work with everyone including competitors)
RESOURCE AWARENESS (Res All) 5.44 out of 10. (Ability to balance your resources)
INNOVATION ZONE (In Zone) 6.45 out of 10. (Ability to work in areas of uncertainty)

* This is not a fixed level, anyone can grow their innovation mindset. Your level has been estimated using an analysis based on the Berkeley Method for Entrepreneurship & Innovation, the Comfort Zone Scale, and fundamental testing methods in social psychology.

www.berkeleyinnovationindex.org
And finally we have moved in to our new highly collaborative innovation space at the Stadium.
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