



# Data-X Master Class Reflection and Next Steps

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# Our Agenda and Purpose

1. Short Version of full course
  1. What, Why, and How for AI
  2. Learn the ML tools/stack
  3. Code samples / basic theory
  4. Starting point to go further

2. Project Options:
  1. Learning basics
  2. Defining Work Project
  3. Improving Existing Project

3. Additional Goals:
  1. Teams – meet each other
  2. Diversity in perspective
  3. Pay it forward
  4. Global resources
  5. Staying connected

Why:  
Relevance to  
Organization

What:  
Technology

How:  
Implementation  
with Innovation  
Behaviors

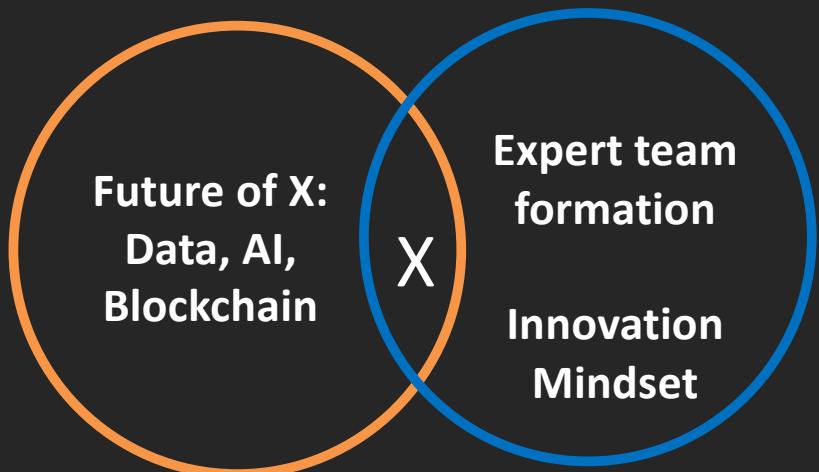
# CIO Connect Data Science Master Class - From Data Strategy to Implementation

## Hong Kong, September 2018

Schedule	Day 1	Day 2
9:00	<b>Welcome and Course Overview. Set Purpose AI, Machine Learning, and Data Science, Part I</b> <ul style="list-style-type: none"> <li>• Brief History</li> <li>• What is Machine Learning, Data Science, and AI</li> <li>• Today's technology in Industry</li> </ul>	<b>Do it Yourself Digital Transformation and Discussion (45 min)</b> <b>Case Examples: Smart Cities (45 min)</b>
10:30	<b>AI, Machine Learning, and Data Science Part II:</b>  <b>Data Science Tools: Where Does Data Come From, How is Data Formatted, Using Open Source Frameworks and APIs, Applying Machine Learning</b>	<ul style="list-style-type: none"> <li>• Using Cloud based Cognitive Services</li> <li>• Google Cloud Introduction</li> <li>• Q/A on how to build/implement</li> <li>• Relationship to AI and Job Loss (time permitting)</li> </ul>
12:00	Lunch Break	Lunch Break
1:30	<b>Getting Value from Data &amp; Business Models. What is your data strategy? EQ Considerations. Data Strategy Exercise</b> <ul style="list-style-type: none"> <li>• What are the challenges? What is the business strategy?</li> <li>• How can technology help? How can customer centric activity help (EQ)?</li> <li>• Group Exercise: Defining your competitive strategy to avoid disruption.</li> <li>• Project Work Time and Project Definition</li> <li>• Two In Class Data Strategy Mapping Examples if time permits</li> </ul>	<b>Subgroup Coaching Sessions and Master Class Cases</b> (4-5 strategy discussions or reviews of Project Low tech Demo)  Topics: <ul style="list-style-type: none"> <li>• Map from Business to Technology Strategy</li> <li>• Architectural Implementation, Systems Level vs Algorithm Level</li> <li>• Organizational Factors</li> </ul>
3:30	<b>Data Science Algorithms and Code:</b> <b>Web Scrape, Machine Learning Algorithm Comparison with Resource Links</b> <ul style="list-style-type: none"> <li>• Open Sources Tools of Data Science, Data Science in Python Jupyter Notebooks</li> <li>• Machine Learning Algorithm Overview. Examples from Numpy &amp; array computation Pandas</li> </ul>	<b>Advanced Topic Overview</b> <ul style="list-style-type: none"> <li>• Resource Guide, Neural Networks, TensorFlow</li> <li>• Trade-off considerations with Freemium APIs</li> </ul> <b>X at Berkeley Labs</b> Wrap up with Reflection on Concepts Learned. <ul style="list-style-type: none"> <li>• Project Discussion Continued</li> <li>• Ways to Stay Connected</li> </ul>

# Berkeley X-Labs

A New Model for Applied Research Labs



## Better University to Industry Connection Models

- ✓ Projects with Business Results
- ✓ Global Teams, Visiting Scholars
- ✓ Company Collaborations
- ✓ Executive Education and Train Trainer Models
- ✓ Self Evaluation Tools
- ✓ Startups Acceleration

Ikhlaq Sidhu, content author

Many industries and teams seek to adapt with Emerging Technology Projects that related to data, AI, blockchain, and other digital transformations

The ACTUAL problem is multi-dimensional:

- Strategy / landscape
- Technical skills
- Cultural transformation
- Organization and Process
- Leadership and Skill gaps

# UC Berkeley EM-Tech Leadership Fellows Program

Develop Technology Leadership  
Solve Real-Life Industry Challenges  
Be Part of a Global Network of Experts and Colleagues



Concept Only - For Feedback - Not Available at this Time

# SCET EM-Tech Leaders Fellows Program

A New Model for Applied Research Labs



Join for a one-year program with as a Berkeley visiting scholar – with 8 live/virtual meetings.



Propose your own real life, complex, leadership challenge –possibly related to data, AI, Blockchain, or other emerging technology



Share real-life updates with world-class technology and business leaders



Access people, lab resources, and new ventures at Berkeley and globally as part of the program

Possible follow-on for small number of ELPP or SVIL participants

Initial Launch: 8 participants in Spring 2019  
Rikhil Sidhu, Content Author

# SCET EM-Tech Leaders Fellows Program

- This program **DOES NOT** focus on
- Classroom education
- Historical case study

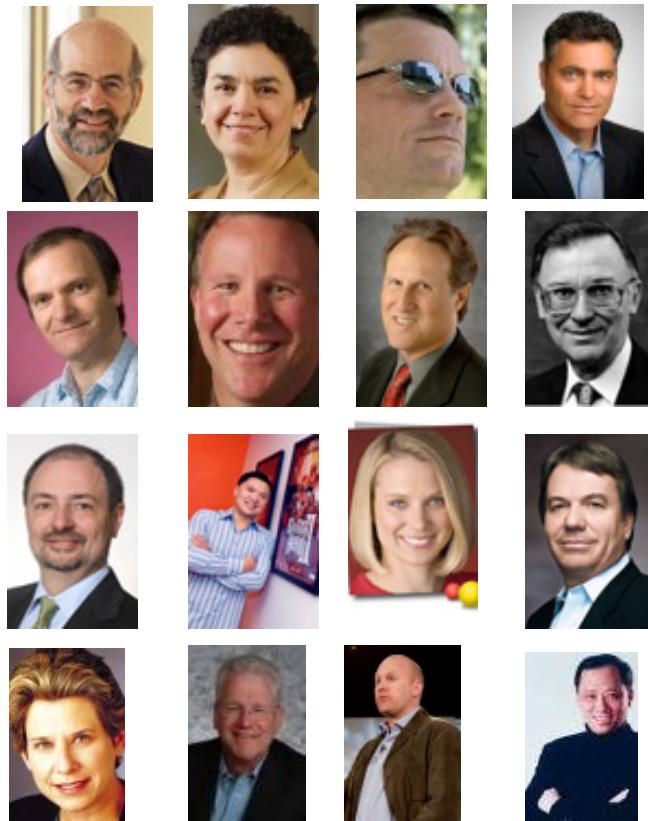
This program **DOES** focus on

- The most real life, current issues
- A world-class network
- Learning from each other in real time.

Concept Only - For Feedback - Not Available at this Time

## Leading Innovators, Entrepreneurs, Leaders Participate in Sutardja Center Programs at Berkeley

Marc Tarpenning, Founder of [Tesla](#)  
Charlie Giancarlo, former Chief Product Officer, [Cisco](#)  
Michael Marks, [KKR](#), former CEO, [Flextronics](#)  
Jerry Fiddler, Founder, CEO [Windriver](#), Intel  
Charles Huang, Co-Founder [Guitar Hero Franchise](#)  
Sabeer Bhatia, CEO and Founder, [Hotmail](#)  
Steve Blank, [Epiphany](#), [MIPS](#), Berkeley, Stanford  
Steve Strandberg, Head Tech. Practice, [Merrill Lynch](#)  
Shomt Ghose, Venture Partner, [Onset Ventures](#)  
Marc Andreessen, Founder, [Netscape](#)  
Larry Baer, COO, [San Francisco Giants](#)  
Jim Davidson, Managing Director, [Silverlake Partners](#)  
In Sik Rhee, co-founder and CEO, [Opsware](#)  
Richard Gorman, SVP, [Siebel Systems](#)  
Rick Hill, CEO, [Novellus Systems](#)  
Brodie Keast, EVP, [TiVo](#)  
Jeff Miller, CEO, [Documentum](#)  
Eva Miranda, SVP, [Sony Corporation](#)  
Geoffrey Moore, [MDV](#), Author, "Crossing the Chasm"  
Peter Thiel, co-founder and CEO, [PayPal](#)  
Stephanie DiMarco, co-founder and CEO, [Advent Software](#)  
Pehong Cheng, CEO, [Broadvision](#)



# Sutardja Center Programs that Support the Fellows Model



Engineering Leadership Professional Program

4.5 months · 1 evening per week · in Silicon Valley  
*Preparing engineering leaders to advance*

Technology Strategy - Leadership Skills - Operations & Finance  
Certificate from Berkeley Engineering

Apply Now to Reserve Your Spot



Silicon Valley Innovation Leadership Week

5 Days · 7 Topics · 12+ Experts  
*Helping executives learn about disruptive technologies & build innovative teams*

X-Labs MasterClass  
Blockchain-X and Data-X  
2 Days: ¼ Executive, ¾ Developer Leve

## Programs

- A. Richard Newton Series
- Berkeley Method of Entrepreneurship Bootcamp
- Certificate in Entrepreneurship and Technology
- Collider Sprints
- Engineering Leadership Professional Program
- Global Partners
- Global Venture Lab
- Management of Technology Innovation
- Silicon Valley Innovation Leadership Week
- Startup Semester at Berkeley
- Summer Abroad
- Visiting Researcher Program

## Reflection and Next Steps

- Learning Summary and Discussion – reflect on valuable portions to you.
- Future – what's next for you / your project?
- More resources at [data-x.blog](#)
- Staying Connected – How can we continue to help with networks, student projects, or other ideas?