DATAWEST

SDSC'S ANNUAL WINTER FORUM ON DATA • DATAWEST.ORG

UC SAN DIEGO - 2019

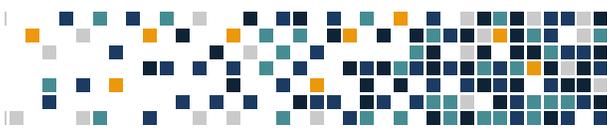## SDSC'S FOURTH DATA WEST TECHNOLOGY FORUM | DEC 10-11, 2019

THE CHALLENGE OF DATA LEADERSHIP: Balancing Privacy, Accountability And Digital Innovation
Venue: Sanford Consortium for Regenerative Medicine, 2880 Torrey Pines Scenic Drive, La Jolla, CA 92037

DAY 1: Tuesday, December 10, 2019 11:30am – 7:00pm
Theme: The Data Governance Revolution

TIME	DESCRIPTION	LOCATION
11:30-1:00	**Registration, Light Lunch, Expo Floor Opens**	1st Floor Lobby
1:00-1:30	**Session 1A** Welcome and Opening Remarks **Chairs:** Prof. Lynda Applegate (HBS), Dr. Mel Horwitch (fmr CEUBS Dean & U.Prof.), Dr. James Short (SDSC)	
1:30-2:00	**Session 2A** Opening Keynote: *Using Data Privacy to Empower Health Research* Dr. Scott Kahn (LunaPBC) **Abstract:** Dr. Kahn will address the reasons why: • Shared health data lacks the necessary richness and representation required for analysis • Having individuals maintain control of their data offers a path to broader research participation • Patient-centric cohorts are longitudinally engaged • Richer data cohorts are ideal for AI model discovery	2nd Floor Auditorium
2:00-3:00	**Session 3A** First Town Hall Discussion Panel: *What if Data Privacy is the Critical Enabler of Business Innovation?* **Panelists:** Dr. Scott Kahn (LunaPBC), Ms. Erin Kenneally (Elchemy), Professor Tim Mackey (UCSD), Ms. Sharon Terry (Genetic Alliance) **Moderator:** Ms. Dawn Barry (LunaDNA) **Abstract:** Ongoing data breaches and the misuse of consumer data by technology companies continues to raise public and legislative concerns about data ownership, privacy, use, and the sharing of data. By harmonizing data privacy regulations across EU member states, GDPR has emerged as the de facto global standard for consumer data. But is GDPR the "last word" in data privacy? Do US companies simply need to adopt GDPR, or should they proactively move beyond GDPR to address anticipated future data challenges, such as the ethical considerations in AI/ML? What are the costs and risks for companies who are slow to react? What if, contrary to the privacy **OR** innovation debate, data privacy is the critical enabler **OF** business innovation?	
	BREAK	
3:30-5:00	**Session 4A** Case Workshop: *Leading the Data Governance Revolution* Professor Lynda Applegate (HBS) **Abstract:** For this case workshop, Professor Lynda Applegate will teach an HBS case study on Collibra – one of the elite start-ups to enter the unicorn ranks with a valuation of over $1B. Founded in 2008, Collibra is a pioneer in defining metadata management and launched its Collibra Governance Center in 2013. Executives from Collibra will join the case discussion as we introduce and explore the 2019 Data West conference theme.	2nd Floor Auditorium
5:00-5:30	**Session 5A** Day One Closing Remarks **Chairs:** Prof. Lynda Applegate (HBS), Dr. Mel Horwitch (fmr CEUBS Dean & U.Prof.), Dr. James Short (SDSC)	
5:30-7:00	**Reception and Tech Expo**	1st Floor Lobby

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DAY 2: Wednesday, December 11, 2019 8:00am – 4:00pm
Theme: The Balancing Act: Privacy, Accountability, Innovation

TIME	DESCRIPTION	LOCATION
8:00-9:00	**Registration & Light Breakfast, Expo Floor**	1st Floor Lobby
9:00-9:30	**Session 1B** Reflections on Day 1, Day 2 Kickoff **Chairs:** Prof. Lynda Applegate (HBS), Dr. Mel Horwitch (fmr CEUBS Dean & U.Prof.), Dr. James Short (SDSC)	2nd Floor Auditorium
9:30-10:00	**Session 2B** Opening Keynote: *Neuroscience Derived Algorithms for Machine Inference and Problem Solving: The State of the Field* Professor Gabriel Silva (UCSD) **Abstract:** This talk will explore the challenges of development algorithms that will allow autonomous systems to go beyond contextual decision making to contextually relevant and autonomous problem solving. Autonomous systems are typically faced with limited computational resources while at the same time necessitating ever-increasing sophisticated local (offline) computations in order to make contextually relevant complex decisions under conditions of limited or selective data. On-going research, in particular derived from neurobiology, is in part pursuing this challenge towards the development of machines that can 'think' on their own, at least under controlled and constrained conditions. Achieving contextually relevant machine-created original ideas and thoughts presents us with a technical problem or challenge the system has not seen before. It also represents a barrier to machine learning that we have not yet overcome.	
10:00-11:15	**Session 3B** Second Town Hall Discussion Panel: *As New Data Technologies Drive Ethical Quandaries, What Happens to Them?* **Panelists:** Dr. Ilkay Altintas (UCSD), Ms. Justine Phillips (Sheppard Mullin), Professor Gabriel Silva (UCSD), Ms. Tamara Zubatiy (VeriCrypt) **Moderator:** Mr. Steve Orrin (Intel) **Abstract:** The adoption and evolution of intelligent machines is expected to expand and make life more efficient and convenient, while at the same time presenting moral dilemmas such as whether AI generates ethical results that are not biased. New technologies posing ethical quandaries are not a new problem, of course, as students of the electrification of factories or of Marconi radio sets will attest. Given that intelligent machines are relying on data generated in some manner by human beings, the presence of conscious or unconscious biases in a decision-making algorithm is plausible. Further, someday machines may be programmed to make choices directly or indirectly that involve human life or emotion. These dilemmas are only nominally about computers. They are much more about our judgments about how and where we choose to use computers.	
	BREAK	
11:30-12:00	**Session 4B** Closing Morning Keynote: *Digital Transformation: It's All About the Data!* Mr. Jonathan Behnke (CIO, City of San Diego) **Abstract:** Digital transformation is driving exponential growth in data. By 2020, it is projected that 40 trillion gigabytes of data will be generated, and that 90% of all data has been generated in the past two years. Five billion You Tube Videos are consumed each day and 300 hours of video are uploaded each minute. Twitter generates 500 million tweets per day. The growth of IoT devices and cloud services is compounding data growth and AI is being leveraged to drive new value from data in innovative ways. However, security breaches and privacy concerns are reaching all-time highs. This session will examine the growth of data and how to manage security, privacy, governance, value, and transparency of data assets as organizations continue digital transformation initiatives.	2nd Floor Auditorium

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Theme: The Balancing Act: Privacy, Accountability, Innovation

TIME	DESCRIPTION	LOCATION
12:00-1:15	**Networking Lunch & Expo Walk Through**	1st Floor Lobby
1:15-1:45	**Session 5B** Afternoon Keynote: *The Data Science-Innovation-Strategy Opportunity* Dr. Mel Horwitch (CEU fmr U. Prof. and CEUBS Dean) **Abstract:** Exemplifying Schumpeterian "creative destruction," data science broadly defined is changing much of the modern economy. It serves as a technology engine stimulating new sectors and firms (under the rubric of AI, machine learning, business analytics, etc.) and triggering pervasive restructuring of existing industries as incumbents attempt to adapt. Still, capturing the large-scale and significant business and societal opportunities made possible by data science's emergence requires more than fielding superior technology per se. Two other especially crucial factors are: (1) incorporating effective modern innovation practices and (2) applying modern strategy approaches. The former—modern innovation practices—include managed technology development (R&D), commercialization and scaling, renewal and disruption, ecosystems, and entrepreneurialism. The latter—modern strategy methods—include analysis/professionalism, global/local sensitivities, and general management. Supported by examples and data from representative sectors, firms, and regions (e.g. Central Eastern Europe, Africa, and the US), one key conclusion is that effective and wise application of innovation and strategy are essential for data science if it is to fulfill a broad and important set of opportunities—opportunities that encompass business success and promoting societal well-being worldwide.	2nd Floor Auditorium
1:45-2:45	**Session 6B** Third Town Hall Panel Discssion: *The Post Facebook-Google-Amazon Data Company: Who is the Next Innovator?* **Panelists:** Dr. Naguib Attia (IBM), Dr. Pieter De Leenheer (Collibra), Mr. Steve Orrin (Intel), Mr. Amir Sternhell (Sertainty) **Moderator:** Mr. Barry Rudolph (VelociData) **Abstract:** The data companies Facebook, Google and Amazon have all gained their greatest successes as their products matured into industrywide platforms – the base of common components around which they have built a steady stream of related products and services. In driving platform innovation, the three have selectively opened their technology to complementors to increase network effects. However, we are still early in our understanding of how platform markets work, and exactly when platform competition begins to resemble the textbook definitions of multiproduct monopoly or oligopoly. All three firms are currently being attacked by legislators as monopolies deserving to be broken up, with the argument that in doing so innovation will dramatically increase. Panelists will offer their views on whether the platform dominance of a few large players drives business innovation, or hinders innovation and the emergence of new data ecosystems with entirely different philosophies and business models for transacting with data.	
	BREAK	
3:00-4:00	**Session 7B** Closing Session: *Seeing What's Next: Leading the Data Governance Revolution Revisited* Professor Lynda Applegate (HBS) **Abstract:** In the closing session, we will discuss key trends that are defining the emerging data governance field and will discuss approaches used to "Seeing What's Next."	2nd Floor Aud.

4:00PM DATAWEST 2019 CONFERENCE CLOSE