Leading Local

Artificial Intelligence and Local Government
Wednesday, June 28, 2023
10:30 a.m. - 12:00 p.m.

TECH OVERVIEW & HOUSEKEEPING

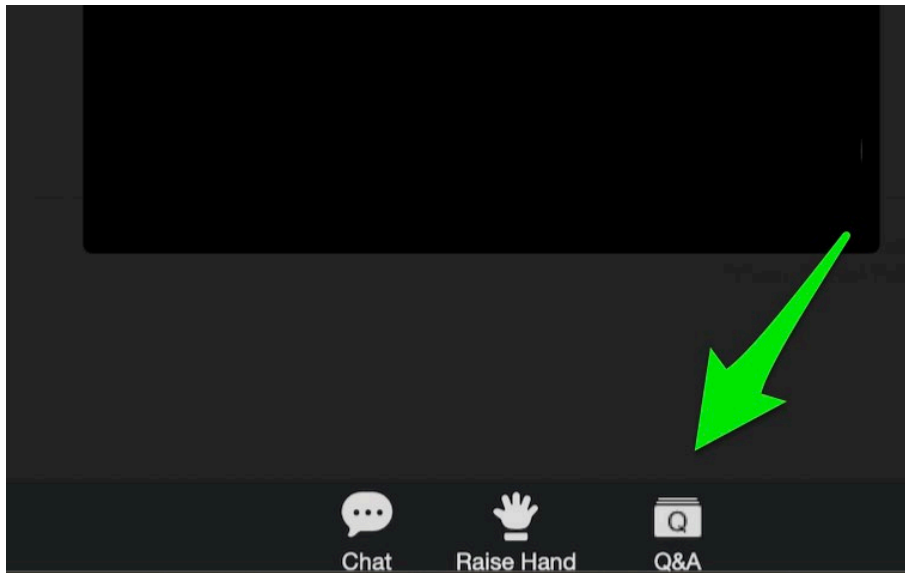- All webinar participants will be on **MUTE** for the duration of the event.

- Please type any content questions for into the **Q&A BOX** at any time during the session.

- Please type into the **CHAT** to notify the meeting host of any logistical questions or technical issues.

- A recording of the session will be available shortly after the webinar.

ABOUT THE INSTITUTE FOR LOCAL GOVERNMENT

NON-PROFIT, NON-PARTISAN AND HERE TO HELP

- The Institute for Local Government is the non-profit training and education affiliate of three statewide local government associations

- Together with our affiliates, we serve over 2,500 local agencies – cities, counties and special districts

- We provide practical and easy-to-use resources so local agencies can effectively implement policies on the ground

LEAGUE OF
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California Special
Districts Association
Districts Stronger Together
CSDA

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Program Areas

Leadership & Governance

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Services

Education & Training

Technical Assistance

Capacity Building

Convening

Our mission is to help local government leaders **navigate complexity**, **increase capacity** & **build trust** in their communities

AGENDA

Quick Poll
Overview of Artificial Intelligence
What is it?
Types & Examples
Opportunities & Threats
Applications for Gov't
Resources
Q&A
Wrap Up

TODAY'S SPEAKER

John Robichaux

AI Expert & Incoming Executive Director
Coleman Fung Institute for Engineering Leadership, UC Berkeley

- 25+ years working on critical issues facing leaders in government, industry, and civil society

- 15+ years working on artificial intelligence (AI)

- Taught at Harvard and Stanford

- Most recently, led Government and Executive Education programs for Stanford's flagship Institute for Human-Centered AI (HAI), offering programs for officials in 40+ countries and all 50 U.S. states

- Based out of Palo Alto, California

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AI AND LOCAL GOVERNMENT

JOHN ROBICHAUX

INSTITUTE FOR LOCAL GOVERNMENT

WEBINAR — JUNE 28, 2023

TRADITIONAL CODING VS. AI

TRADITIONAL CODING

- Excellent for well-known contexts

- Set of rules – can be cumbersome

- May require immense human work upfront

- Less effective in situations of uncertainty

AI (AND MACHINE LEARNING)

- Excels in situations of uncertainty

- Models "learn" and adapt to meet a given objective

- May require immense compute power, time, and money (esp. upfront)

- Can dramatically reduce the volume of code needed (incl. human work)

- Often identifies connections not easily identified by humans

EXAMPLE AREAS OF AI

Natural Language Processing (NLP)

Computer Vision

Robotics

Expert Systems

TWO KEY TYPES OF AI

"NARROW" AI

- Narrow use cases

- Can be hyper-optimized

- Can be extraordinarily safe, hyper-precise

- Been around for many years

- Most important for operational impact today

- Not getting the media attention

- Within reach of many organizations

FOUNDATION MODELS

- Use immense amounts of data to build a "wide" model that can serve as a "foundation" to more honed use cases

- Basis of generative AI in the news today

- Currently, more prone to errors and hallucinations, especially when not fine tuned

- Accessible to only a handful of companies globally (due to time and cost involved)

- May be the future, down the road, but currently less operational for most needs

- Emergent properties!

BIG PICTURE: TRANSFORMATIONAL AND LEGITIMATE WORRIES

- Unleash an incredible age of HUMAN creativity – for good and ill

- Medicine

- Education

- Science

- History

- Art

- Dark sides: error, bias, failure of human oversight, too much trust, bad counsel, public service technology unable to keep up

GOVERNMENT USE CASES

- Wildfire planning

- Language-interpreter matching

- Flood mitigation/ dam release

- Predictive analytics (energy, traffic)

- Adjudication processes

- Mental health/ Public health resources

- Speech analysis (policing, education)

- Facial recognition (and bans)

- Brainstorming (neighborhood planning, architecture, etc.)

- Digital records

CONCERNS FOR TODAY'S LEADERS
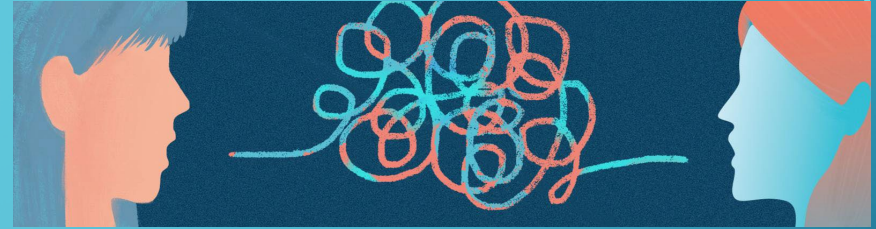
ACROSS ALL LEADERS

- Executive Expertise – today's executives were almost all trained in the pre-AI era (incl. CTOs, CIOs)

- Gold Rush and Hype - snake oil everywhere

- Unstructured Data - and cost to structure

- Speed of advancements

- So many unknown impacts, outcomes

- Investment strategy

NOTABLE FOR GOVERNMENTS

- Older workforce exacerbates the executive expertise concern

- Top talent goes to private sector

- Cutting edge AI remains only accessible to few companies globally (gov'ts, education, public service tech unable to keep up)

- Sensitive data

- Uniquely sensitive entity

- Antiquated systems even before AI

- Black box problem – accountability, auditability, limits of explainability

- Misinformation and local news deserts

TOP TAKEAWAYS

IMMENSE OPPORTUNITIES REMAIN IN NARROW AI – DON'T IGNORE THEM

Watch the headlines about large models, use when helpful and appropriate, but keep narrow AI in view

YOU'RE NOT ALONE

Everyone is trying to keep up as advances accelerate and identify what is possible

REAL POLICY CHOICES, PROFOUND RESPONSIBILITY

Privacy and surveillance, areas where safety present unique challenges, effectiveness and auditability, investment choices, and more…

EXAMPLE RESOURCES

- A Policy Maker's Guide to Artificial Intelligence for State and Local Governments, Carnegie Mellon University

- AI for the People: The Use of AI to Improve Government Performance, Mark Fagan, Harvard Kennedy School

- University of California's four-campus CITRIS Policy Lab and AI Policy Hub

- Foundation Models: Huge "Foundation Models" are Turbo-Charging AI Progress, *The Economist*; and the Stanford Center for Research on Foundation Models benchmarking project, HELM (Holistic Evaluation of Language Models)

- The AI Awakening: What Does It Mean for the Economy?, Erik Brynjolfsson, Congressional Research Service

- Wildfires: CalFire, Office of Wildfire Technology Research and Development and The power of AI in wildfire prediction and prevention (World Economic Forum, using an example from Turkey)

- Santa Clara County and Stanford RegLab example: Designing Accountable Health Care Algorithms: Lessons from COVID-19 Contact Tracing, NEJM Catalyst

EXAMPLE RESOURCES

- UK example, national AI strategy for local government

- Flood control: University of New Orleans Researchers to Use Artificial Intelligence to Detect Flood Control Deficiencies

- U.S. Federal Agencies Examples: Government by Algorithm: AI in Federal Administrative Agencies

- How AI Helps State and Local Governments Work Smarter, GovTech article by two Oracle directors

- The Current Landscape for AI in State and Local Government, StateTech article by CDW rep

- The Government and Public Services AI Dossier, Deloitte's AI Institute

- AI Is Here To Stay In Your City And Local Government, *Forbes*

QUESTIONS

Type any questions for the panelist into the **Q&A BOX.**

RECORDING AVAILABLE SOON

The recorded presentation and materials will be shared electronically with all attendees a few days after the webinar.

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