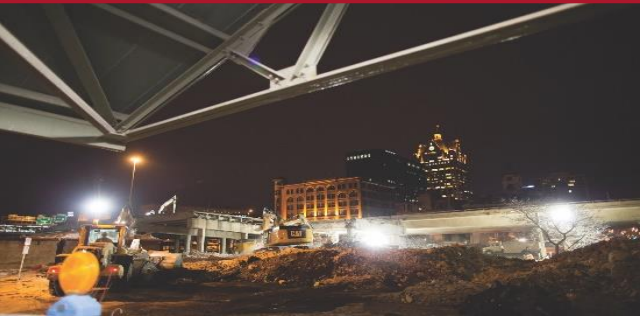


2020 TECHNOLOGY TRENDS

Acquisition Hour Webinar

July 15, 2020



WEBINAR ETIQUETTE

PLEASE

- Log into the GoToWebinar session with the name that you registered with online
- Place your phone or computer on MUTE
- Use the QUESTIONS option to ask your question(s).
 - We will share the questions with our guest speaker who will respond to the group

THANK YOU!

ABOUT WPI SUPPORTING THE MISSION

**Celebrating 32 Years of
serving Wisconsin Business!**



Assist businesses in creating, developing and growing their sales, revenue and jobs through Federal, State and Local Government contracts.

- **INDIVIDUAL COUNSELING** – At our offices, at clients facility or via telephone/GoToWebinar
- **SMALL GROUP TRAINING** – Workshops and webinars
- **CONFERENCES** to include one on one or roundtable sessions

Last year WPI provided training at over 100 events and provided service to over 1,200 companies

WPI is a Procurement Technical Assistance Center (PTAC) funded in part by the Defense Logistics Agency (DLA), WEDC and other funding sources.

WPI OFFICE LOCATIONS

▪ MILWAUKEE

- *Technology Innovation Center*

▪ MADISON

- *FEED Kitchens*
- *Dane County Latino Chamber of Commerce*
- *Wisconsin Manufacturing Extension Partnership (WMEP)*
- *Madison Area Technical College (MATC)*

▪ CAMP DOUGLAS

- *Juneau County Economic Development Corporation (JCEDC)*

▪ STEVENS POINT

- *IDEA Center*

▪ APPLETON

- *Fox Valley Technical College*

▪ OSHKOSH

- *Fox Valley Technical College*
- *Greater Oshkosh Economic Development Corporation*

▪ EAU CLAIRE

- *Western Dairyland*

▪ MENOMONIE

- *Dunn County Economic Development Corporation*

▪ LADYSMITH

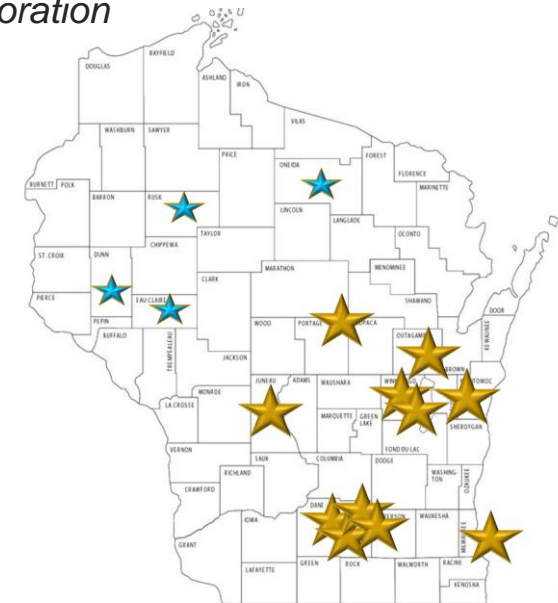
- *Indianhead Community Action Agency*

▪ RHINELANDER

- *Nicolet Area Technical College*

▪ GREEN BAY

- *Advance Business & Manufacturing Center*





Search ...

BLOG SERVICES ABOUT **CLIENT PORTAL** SPONSORSHIP CONTACT



- EVENT CALENDAR
- FEDERAL GOVERNMENT
- STATE & LOCAL GOVERNMENT
- GRANTS
- SUCCESS & AWARDS
- FAQS



www.wispro.org

UPCOMING EVENTS

- WED 21** Acquisition Hour: Government Property Management for Federal Contractors and Subcontractors
August 21 @ 12:00 pm - 1:00 pm
- THU 22** Advancing Cybersecurity in the Industry, Energy, Water Nexus – Oshkosh, WI
August 22 @ 9:00 am - 3:00 pm
Oshkosh WI
- THU 22** NDIA Great Lakes Chapter 10th Anniversary – Milwaukee, WI
August 22 @ 12:30 pm - 7:30 pm
Brookfield Wisconsin
- SEP 11** Acquisition Hour: The End of the Fiscal Year is Here – What is Hot and What is Not
September 11 @ 12:00 pm - 1:00 pm

[View More...](#)

CURRENT OPPORTUNITIES (1)

GET STARTED WITH THE BASICS

Questions & answers on how to get started.

[GET STARTED](#)

SIGN-UP FOR OUR NEWSLETTER

Stay up-to-date with the latest WPI news.

[SIGN UP](#)

HAVE A QUESTION? WE'RE HERE TO HELP.

One of our staff of experts is available to answer your questions.

[GET HELP](#)

Merri Beckfield

Client Success Manager; MARS Solutions Group



Speaker Merri Beckfield, MS has over 25 years of experience in business information systems and technology. She is currently with MARS Solutions Group with a focus on providing data and talent solutions. In parallel to her corporate career in technology, she teaches graduate courses in the College of Computing, Digital and Media at DePaul University. Over the course of her career, she has supported a wide variety of business functions such as Manufacturing, Procurement, Finance and Sales. Her roles have included systems development, systems analysis and design, project management, data management, business intelligence and analytics, program management and systems support.

TECHNOLOGY TRENDS



Drivers



Foundational Technology

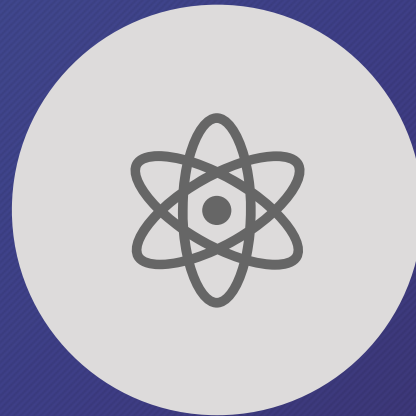
Value and Ease

Security and Ethics

Foundational Technology



AI AND ML



QUANTUM COMPUTING,
5D, 5G

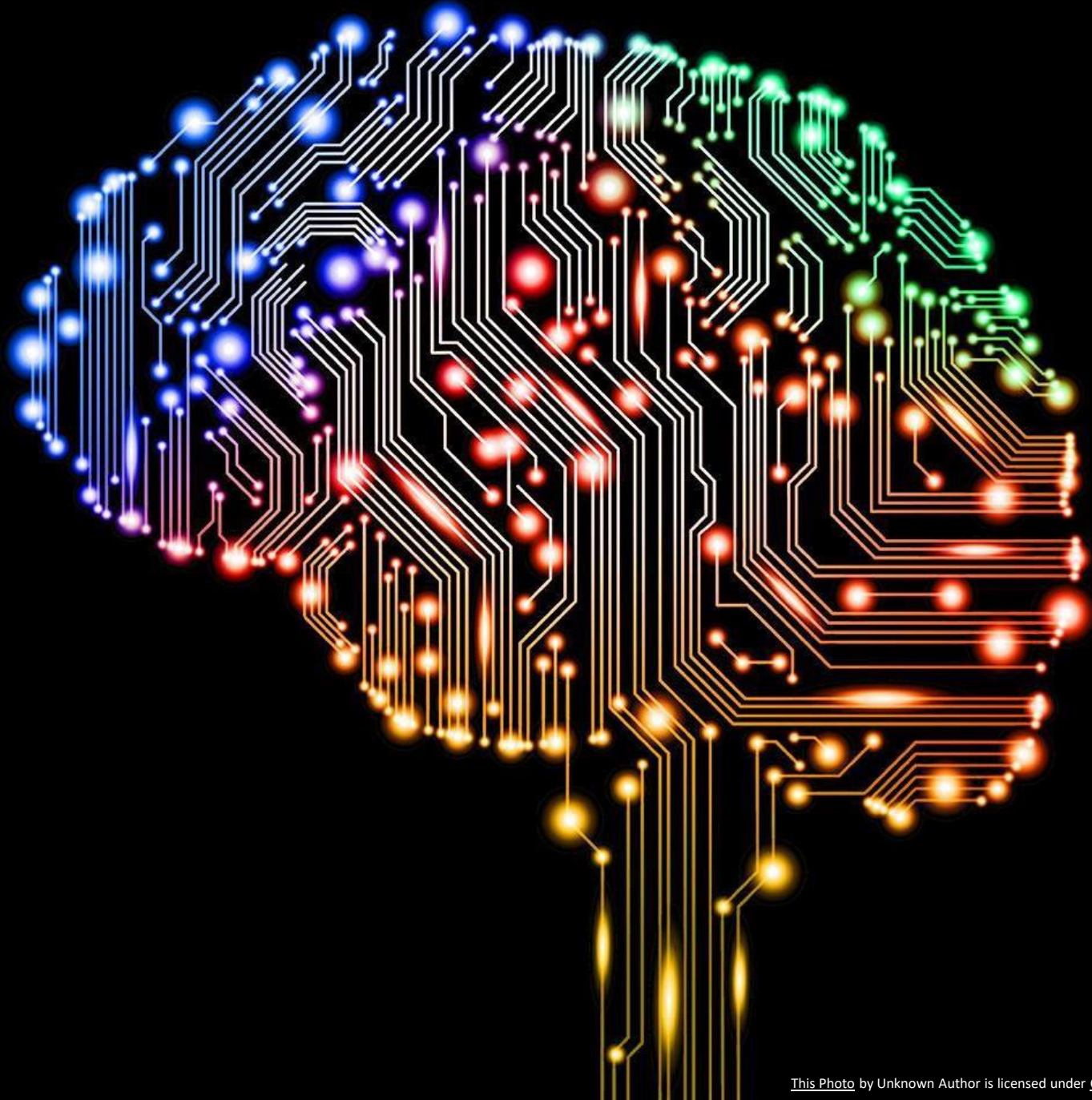


CLOUD, DISTRIBUTED
CLOUD, EDGE COMPUTING

A futuristic robot with a human-like face, resting its chin on its hand in a thoughtful pose. The robot is white and red, with a glowing blue eye. The background is dark and blurred.

AI and ML

Are Artificial Intelligence and Machine Learning the same thing?

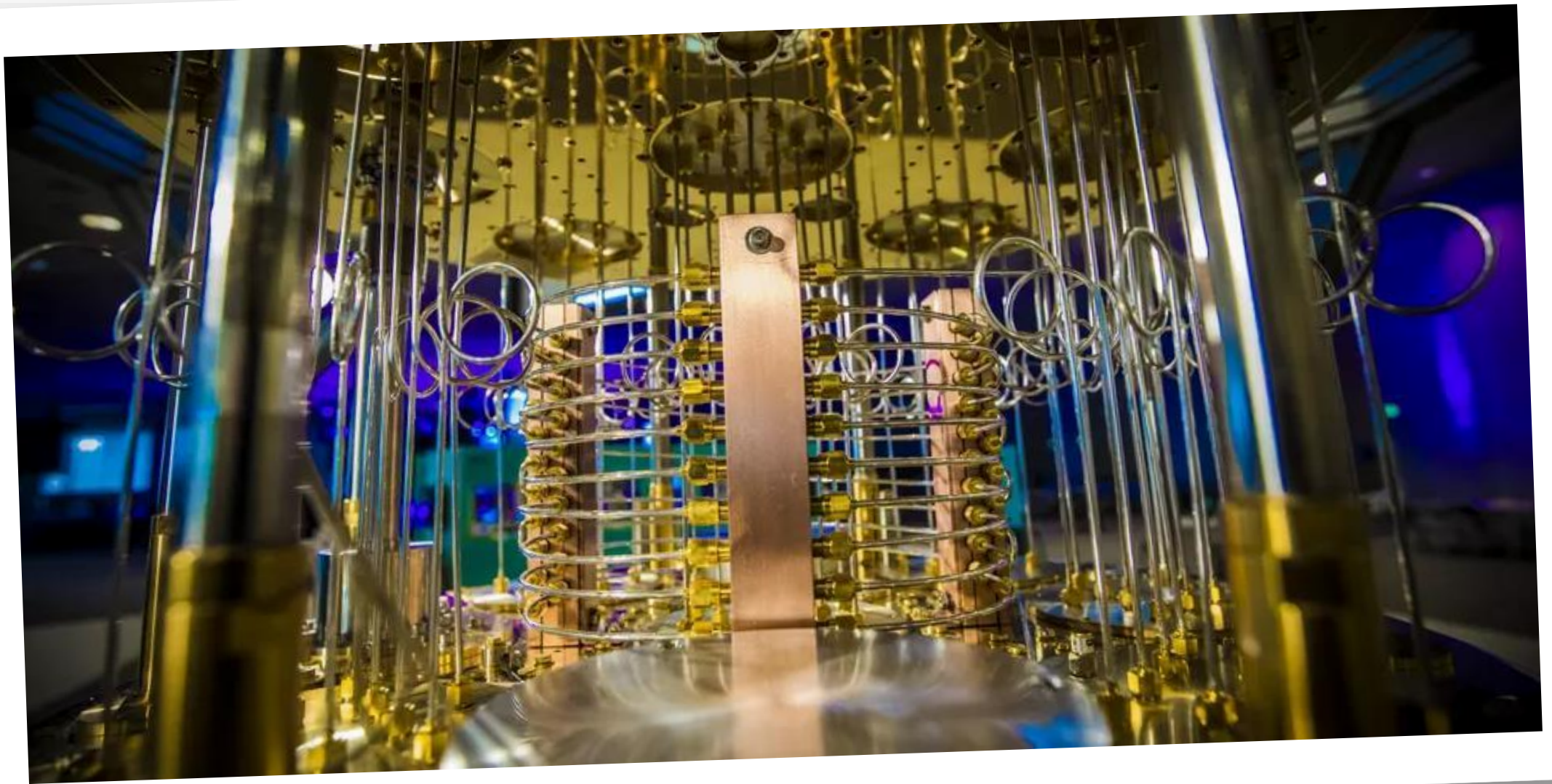


AI: Simulation
of human
intelligence
by a machine



ML: Actions of machine are based *on learning* not coding

Where is ML in your life?
Can you name 5? 10?



Traditional vs. Quantum

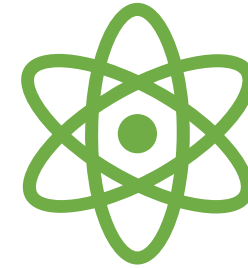


Traditional

BINARY (0 or 1)

REMAINS

USUAL NEEDS



Quantum

ATOM BASED

SUPPLEMENTS

HIGH POWER NEEDS





Source: <https://news.microsoft.com/innovation-stories/ignite-project-silica-superman/>



Speed
Reliability



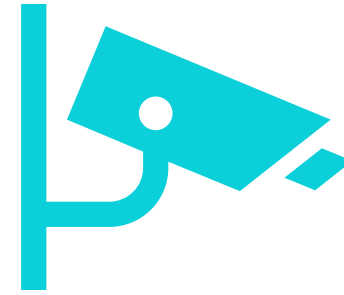


The Cloud

Source: <https://www.wired.com/2012/10/ff-inside-google-data-center/>

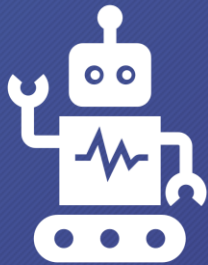


Distributed Cloud



Edge Computing

Value and Ease



Robots, RPA (Robotic Process Automation), Cobots



Democratization, Voice, Natural Language Processing (NLP)



Internet of Things, Digital Twins, Autonomous Vehicles



BETTER MEDICINE THROUGH MACHINE LEARNING

Suchi Saria / Johns Hopkins University

TED^x

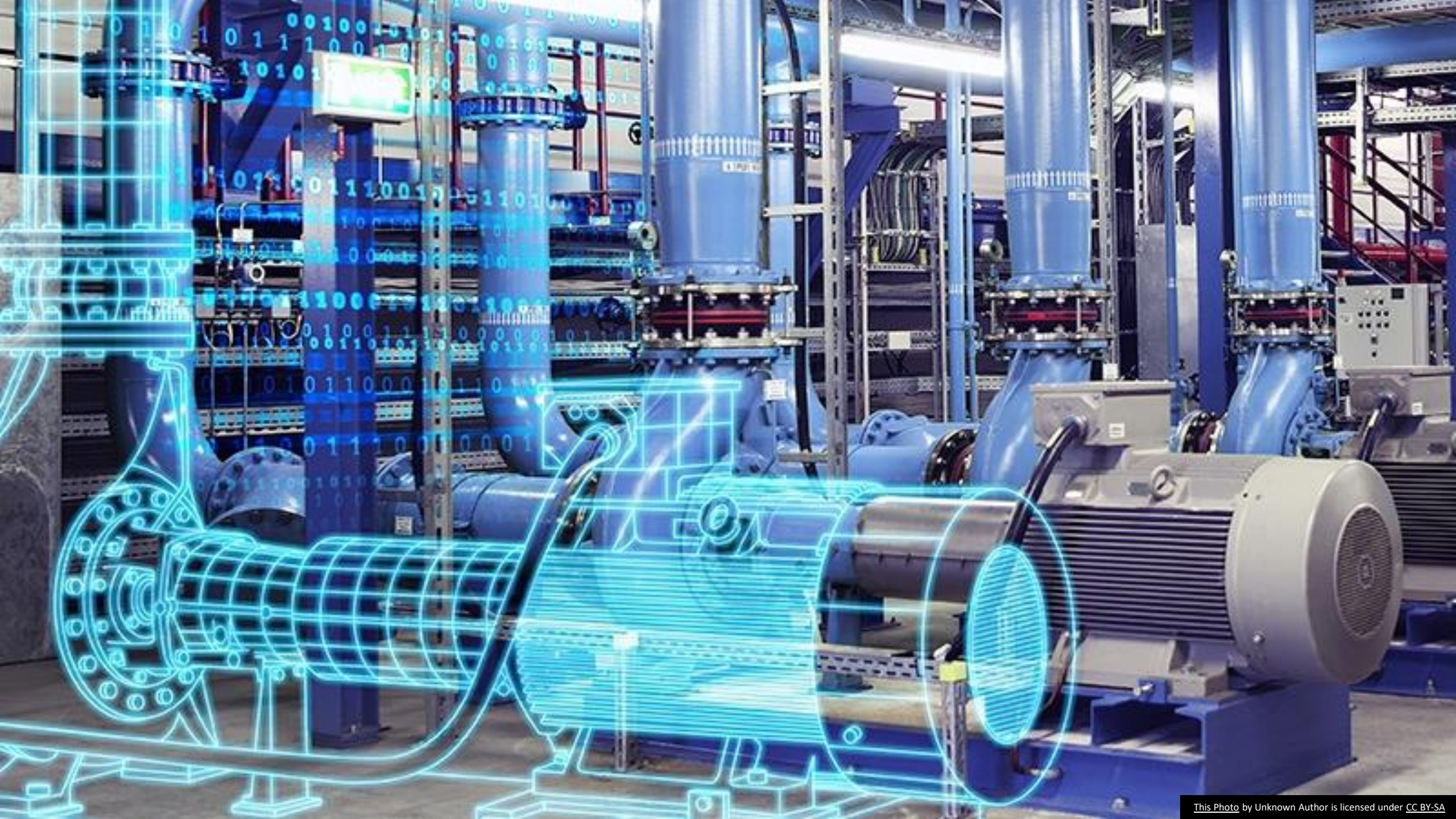
▶ ⏪ 🔊 0:11 / 17:56



<https://www.youtube.com/watch?v=Nj2YSLPn6OY>



Voice, NLP and Democratization



Security and Ethics



Cybersecurity



Blockchain



Data Ethics

What percent of e-mail traffic was spam in March 2020?

Globally what does an average data breach cost?

True or False? 53% of Companies had over 1000 sensitive files open to every employee?





Allow

Permit valid access and prevent unauthorized access



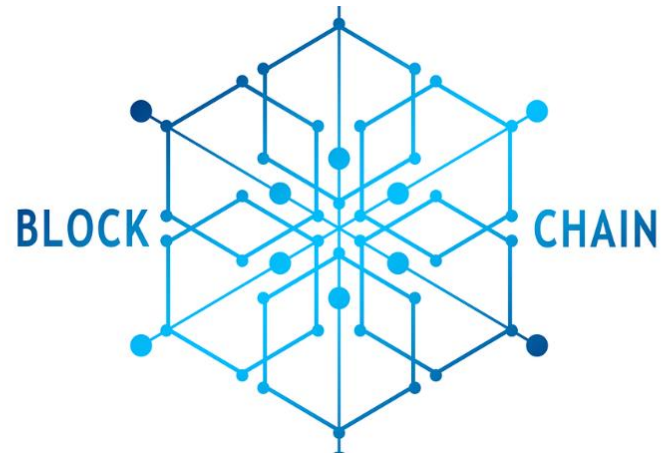
Comply

Assure compliance with regulation



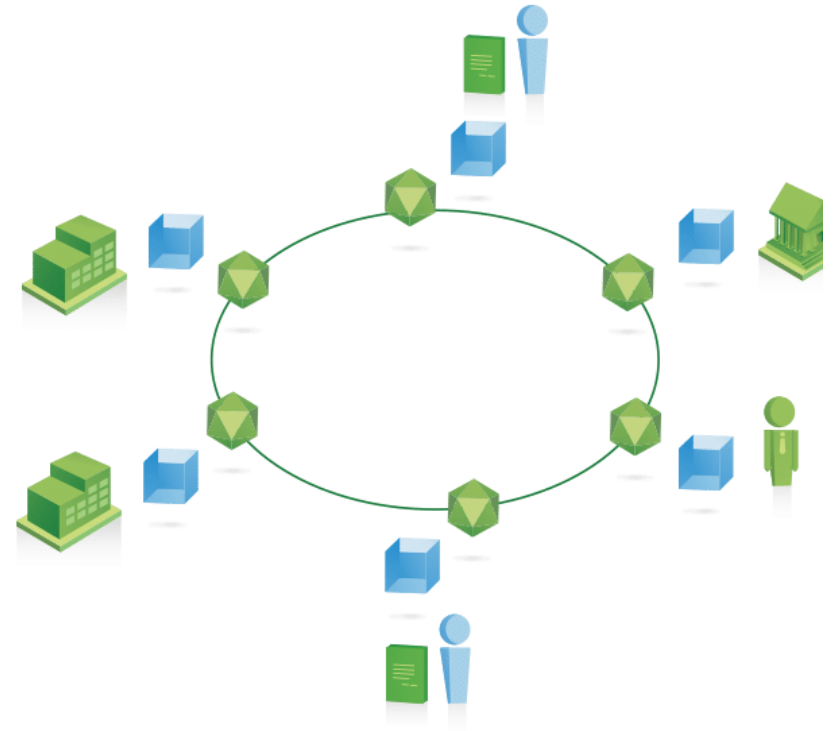
Meet

Ensure expectations on privacy/confidentiality are met



Trusted

Distributed



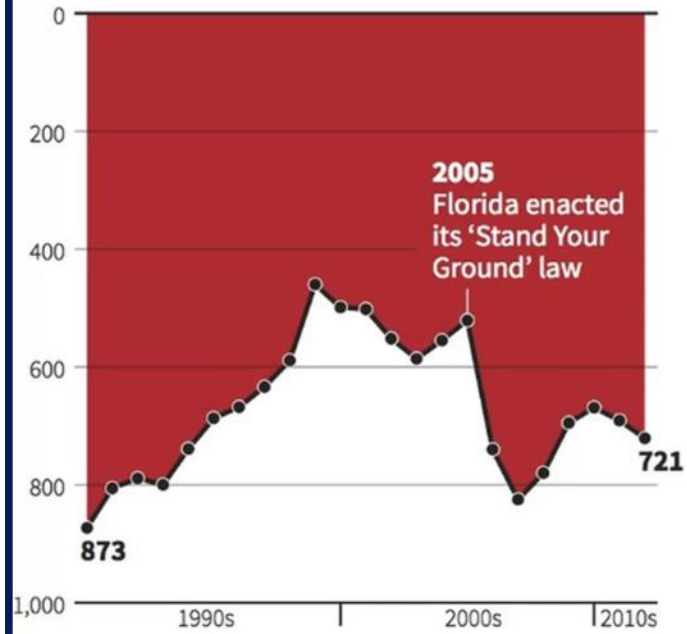
Tamper Resistant



Data Ethics

Gun deaths in Florida

Number of murders committed using firearms



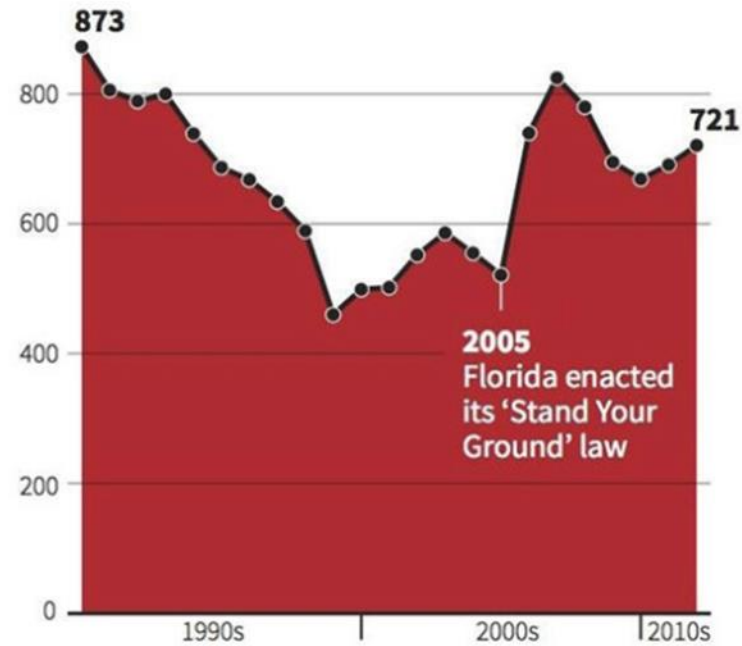
Source: Florida Department of Law Enforcement

© Chan 16/02/2014

REUTERS

Gun deaths in Florida

Number of murders committed using firearms



Source: Florida Department of Law Enforcement

Data Ethics
Too

Quick Recap



Foundational Technology

Value and Ease

Security and Ethics

So What?



“4th industrial revolution”
Bernard Marr, 05/04/2020

“Changing every aspect of our existence”
Gartner, 03/2020

What's your role as a human?



- **What is the acceptable point at which we're all OK with A.I. evolving without humans directly in the loop?**
- **What is our motivation for A.I.? Is it aligned with the best long-term interests of humanity?**

Amy Webb, Author – “The Big 9”



Now What?

Keeping Up




Know just enough



Know who knows



Make it easy



DO SOMETHING TODAY
THAT YOUR FUTURE
SELF WILL THANK
YOU FOR

Know Just Enough

Annual “Trend Reports”



Know Who Knows



Acquire a broad
network



Online communities



Don't be shy

Make it Easy



Look



Listen



Follow & Learn

Look and Learn



- Gartner Strategic Technology Trends 2020 <https://www.youtube.com/watch?v=FBvlsS9VymI>
- A Beginner's Guide to Quantum Computing https://www.ted.com/talks/shohini_ghose_a_beginner_s_guide_to_quantum_computing
- Why digital twins will be the backbone of industry in the future <https://www.youtube.com/watch?v=ObGhB9CCHP8>
- Digital Twins <https://www.challenge.org/insights/digital-twin-for-cancer-treatment/>
- Blockchain Basics: <https://www.ibm.com/blockchain/what-is-blockchain>
- How Machines Learn <https://www.youtube.com/watch?v=R9OHn5ZF4Uo>
- How Machines Really Learn <https://www.youtube.com/watch?v=vvWpdrfoEv0>

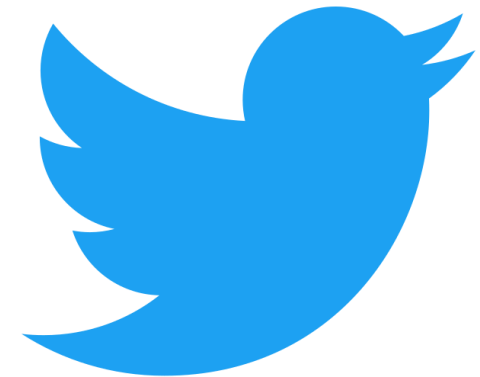
Listen and Learn

- Audible
 - The Big 9 by Amy Webb
 - You Look Like a Thing and I Love You by Janelle Shane
- Podcasts
- Lots of low cost/free training options to watch and listen to:
 - Udemy
 - LinkedIn Learning
 - Microsoft
 - IBM
 - SAP
 - Coursera – Can audit for free
 - Edx.org



Follow and Learn

- LinkedIn, Twitter and so on.
- Examples
 - Allie Miller (Amazon AI)
 - Bernard Marr (futurist)
 - Lisa Seacat Deluca (IBM Digital Twins)
 - Pascal Bornet (McKinsey AI and Digital)
 - Satya Nadella (Microsoft CEO)
 - Microsoft, Deloitte, IBM, Wired, The Economist
 - Groups – Alumni, Local/Regional User Groups, Professional Groups





Q&A



CONTACT INFORMATION

Merri Beckfield

MerriB@marssg.com

<https://www.linkedin.com/in/merri-beckfield/>



THANK YOU

UPCOMING TRAINING - EVENTS

ACQUISITION HOUR LIVE WEBINARS SERIES

- July 21, 2020
OFCCP Compliance 101
[CLICK HERE](#) for additional information
Presented by Roselle Rogers & Tim Muma, LocalJobNetwork
- July 22, 2020
The HUBZone Certification Program
[CLICK HERE](#) for additional information
Presented by Shane Mahaffy, US Small Business Administration (SBA)
- July 24, 2020
Tools and Resources to use for Gaining a Better Understanding of your Federal Customer
[CLICK HERE](#) for additional information
Presented by Marc Violante, Wisconsin Procurement Institute
- July 28, 2020
The Spend to the End
[CLICK HERE](#) for additional information
Presented by Marc Violante, Wisconsin Procurement Institute
- August 25, 2020
State and Federal Certifications For Veteran and Service Disabled Veteran Owned Businesses
[CLICK HERE](#) for additional information
Presented by Shane Mahaffy, US Small Business Administration (SBA) and Mark Dennis, Wisconsin Procurement Institute (WPI)

- SAVE THE DATE -



14th Annual Wisconsin Government Opportunities Business Conference (GOBC)



In partnership with Volk Field ANGB and Fort McCoy

October 15, 2020

In-person at Volk Field in Camp Douglas, WI

More info at [wispro.org](https://www.wispro.org)

<https://www.wispro.org/event/14th-annual-wisconsin-government-business-opportunities-conference-gobc-2/>



14th Annual Wisconsin Government Opportunities Business Conference (GOBC)



In partnership with Volk Field ANGB and Fort McCoy

HOSTS





14th Annual Wisconsin Government Opportunities Business Conference (GOBC)



In partnership with Volk Field ANG and Fort McCoy

PARTNERS



A CRITICAL NOTICE FROM WPI

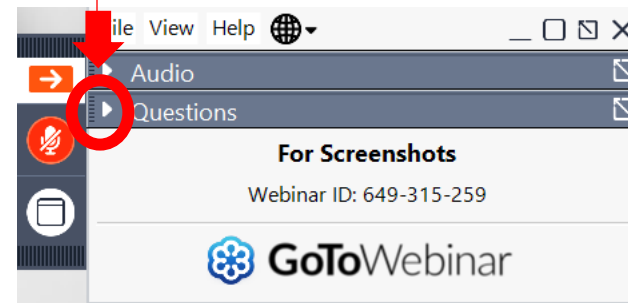
- If you are a current **FEDERAL / DOD CONTRACTOR** or **SUBCONTRACTOR** – you may have **CYBER – DATA SECURITY REQUIREMENTS** in your contract.
- If you are responding to any **CURRENT FEDERAL SOLICITATIONS** - be aware of your obligations:
 - Key clauses are 52.204-21, 252.204-7008 and 252.204-7012
 - Review for other possible requirements
- If you are a **DOD CONTRACTOR** or **SUBCONTRACTOR** – you will have new **CYBER COMPLIANCE – CERTIFICATION REQUIREMENTS** that may impact your business as early as the end of this calendar year.
 - See: <https://www.acq.osd.mil/cmmc> and <https://www.cmmcab.org> for more up to date information.
 - *Contact Marc Violante at WPI - marcv@wispro.org or 920-456-9990*

QUESTIONS?



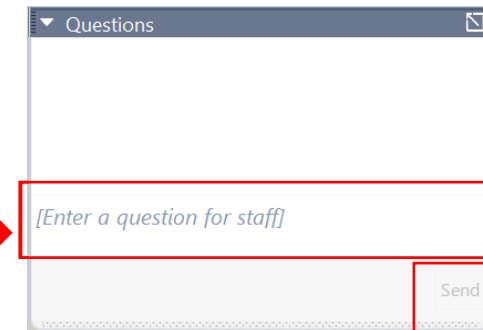
OPENING THE QUESTIONS BOX

Click here to access
within the Control Panel



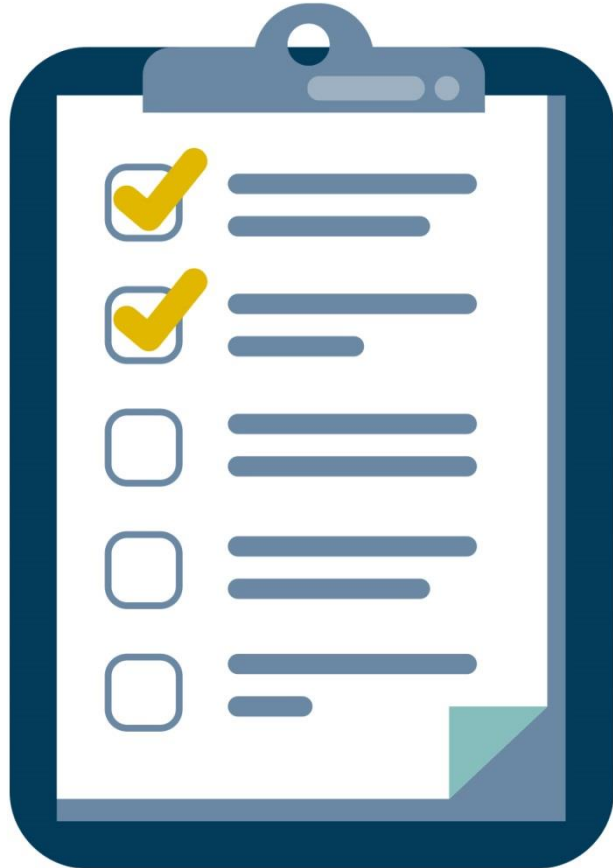
USING THE QUESTIONS BOX

Type questions
here at any time
during a
presentation



Click Send when ready to submit a question

SURVEY



CONTINUING PROFESSIONAL EDUCATION



CPE Certificate available, please contact:

Benjamin Blanc

benjaminb@wispro.org

PRESENTED BY

Wisconsin Procurement Institute (WPI)

www.wispro.org

Merri Beckfield
MARS Solutions Group

MerriB@marssg.com

10437 Innovation Drive, Suite 320
Milwaukee, WI 53226