Tuesday 06 December 2022

Time	Primary
08:30	Cross Consortia Welcome & Intros
09:00	Cross Consortia Keynote - Emerging Technologies Towards Net Zero and Sustainability Goals *Presenter: Kathleen Kennedy, Executive Director, MIT Center for Collective Intelligence* Description: Supermind Design Today, we cannot continue to construct systems like we have in the past. We need a new path forward that takes the best from the past and couples that with the power of new frameworks and digital technology that will build powerful systems for a sustainable future. At the MIT Center for Collective Intelligence we have developed a new framework called Supermind Design, which is an approach that emphasizes generating innovative new possibilities for how to configure these systems and help to make them more intelligent.
10:00	Morning Break
10:30	Keynote: Digital Twins in Oil and Gas
11:30	Working Group Opportunities and Updates *Presenter: Dan Isaacs, CTO, Digital Twin Consortium*
12:00	Lunch
13:00	What is next for the Digital Twin Capabilities Periodic Table? *Presenter: Pieter Van Schalkwyk, CEO, XMPro* Description: The Digital Twin Capabilities Periodic table has been downloaded hundreds of times from the DTC website, it is on the Open Source repository, and we are planning an updated release. Join this session to see what is planned for the update and how you can contribute to it. We'll also cover what is there now, and how you can use it to provide guidance for end-users that starting out and scaling out.
13:20	Reference Architecture Update *Presenter: David McKee, CEO, Slingshot Simulations*

Time	
13:40	Capabilities & Technology Roundtable
14:30	Afternoon Break
15:00	Infrastructure Digital Twinning *Presenter: Eva Agapaki, Professor ,University of Florida*
15:30	Digital Twins for Emergency Communication Deployment and Services *Presenter: David Shaw, CEO, Intuitus Cyber*
16:00	Industrial Metaverse and Sustainability Brainstorm *Presenter: Ron Zahavi, Chief Strategist for IoT Standards, Microsoft*
16:30	Using Automated Reasoning to Build and Verify Digital Twins *Presenter: Jamie Smith, Vice President of Product Management - Head of Products for Safety Critical Industries, Imandra* Description: Automated reasoning and formal verification allow teams to build digital twins that are formally verified to be correct. We will show how developers use Imandra to build and verify digital twins and the benefits gained by organizations using these digital twins in production.
17:00	Closing Remarks

17:15

Wednesday 07 December 2022

Time	Primary
09:00	Keynote: Sustainable Transformation and the Future of Cities and Industry *Presenter: Will Thompson, Chief Strategy Officer, Forbes Ignite* Description: For the first time in history, technology now makes it possible for cities and companies to grow while becoming more sustainable and resilient. We call this sustainable transformation, the successor to digital transformation. The same technologies that will get us to net zero are also those that will protect our organizations and governments from the most disruptive decade in living memory, where cheap fossil fuel energy, abundant materials, just in time supply chains, and even globalization itself can no longer be counted

	on. In this keynote, you'll learn how the information technology revolution is giving way to a new era of exponential innovation in the operational technologies that make the modern world. We'll discuss the way IT/OT convergence sits at the center of sustainable transformation, and how all of these new, cutting edge technologies must be connected through intelligent infrastructure to deliver on their promise.
10:00	Morning Break
10:30	Keynote: Navigating Complexity in a Public Sector Digital Twin - The Case of OC Public Works *Presenters: Michael LaFontaine, Deputy County Surveyor, Orange County Public Works, Dr. Kostas Alexandridis, GIS Analyst / Spatial Complex Systems Scientist, Orange County Survey Geospatial Application, Adam Brasic, Senior Solutions Architect, Nvidia* Description: Orange County has embarked on a journey to develop a sustainable Digital Twin to better serve the community and its partners for a lifetime. It's diverse portfolio, data silos, and 950 square mile geography has presented a complex problem. OCPW along with its partners have utilized a unique data architecture, machine learning, and new applications for interoperability to solve many of these issues. Join OCPW in collaboration with Nvidia to discuss how they've navigated their complex journey in the Digital County Twin.
11:15	Keynote: 21st Century Active Digital Twin and Intelligent Infrastructure *Presenter: Jeff DeCoux, CEO, Autonomy Institute* Description: Hear from several visionary real estate developers that are supporting the nations first Intelligent Infrastructure Corridor and Active Digital Twin. The SH130 region has dozens of collaborators and will support Campus of the Future, Community of the Future, and City of the Future developments. The Autonomy Institute and TAA will provide the tactical and strategic process of establishing an Active Digital Twin within a Public-Private Partnership.
12:00	Lunch With Luminary Presentation
13:30	Assuring Trustworthiness in Dynamic Systems Using Digital Twins and Trust Vectors *Presenter: Detlev Richter, Global Head of Industrial and Energy Products, TUV SUD*
14:00	Panel
15:00	Afternoon Break
	Digital Twins for Structural Integrity Analysis

Time	
15:30	*Presenter: Javier Diaz, CTO, Aingura IIoT*
16:00	Smart Agriculture and Sustainability for Reducing Food and Waste *Presenter: Ziynet Boz Ph.d., Assistant Professor - Agricultural & Biological Engineering, University of Florida*
16:30	Value Digital Twins *Presenter: Shawn Kimmel, Managing Director, Ernst & Young Parthenon* Description: EY supported the development of Virtual Open Innovation Collaborative Environment for Safety (VOICES) - a centralized, industry-wide tool that allows for bi-directional collaboration on a distributed test infrastructure, combining digital twin simulations with real world components through various sensors and data systems. VOICES aims to provide a common architecture that improves the reuse and interoperability of test assets, thus reducing development, operation, and maintenance costs of test facilities. The project was delivered for the Federal Highway and Safety Administration and required EY to partner with 100+ public and private entities from across the automotive, autonomous vehicle, and telecommunications, and technology sectors. The project is ongoing and VOICES aims to reduce the financial, operational, and maintenance costs of testing; allowing for improved fidelity and quicker market entry for novel emerging automotive technology. Those solutions, specifically AVs could save: $158B in fuel; 563B in crashes; $138 in congestion; and $422B in productivity.
17:00	Closing Remarks
17:15	
17:30	Networking Reception

19:00

Thursday 08 December 2022

Time	Primary
08:30	Buildings as Batteries Technology Showcase *Presenter: John Reynolds, CEO, Agile Fractal Grid*
09:00	Technology Showcase Roundtable

Time	Session
10:00	**Morning Break**
10:30	Digital Twin in Wireless *Presenter: Nicolas Waern, CEO, Winniio*
11:00	Power Systems Workshop *Presenter: Mike Marshall, CEO, DRG Solutions*
11:30	Climate Prediction VR *Presenter: Bruce Leybourne, CEO, Stellar Transformer*
12:00	**Lunch**
13:00	Digital Twin Opportunities in the Manufacturing Landscape
14:00	Wrap Up

14:30