

DIGITAL ENGINEERING HUB

# From Digital Transformation to Digital Engineering

### Digital Engineering Hub Launch Event

Tuesday, Aug. 26, 2025 8:00 a.m.-7 p.m. Rowan Hall Auditorium

#### **EVENT OVERVIEW**

Digital Transformation (DT) — the adoption and integration of digital technologies — is reshaping traditional business models by changing how operations, product development and services are delivered. The global digital transformation market is growing rapidly, affecting organizations at both the infrastructure and decision-making levels. This modernization is already part of everyday life, with new and unprecedented services emerging in web, cloud and mobile technologies that rely heavily on big data, the internet of things (IoT) and artificial intelligence.

The applications of DT in engineering, referred to here as Digital Engineering (DE), include sweeping changes in medical practice (such as robotic-assisted surgery), energy (such as new power systems development), manufacturing (such as advanced manufacturing), systems engineering (such as model-based systems development), as well as education and workforce development (such as immersive training and deployment).

#### **EVENT OUTLINE**

This event will introduce a new collaborative initiative in the Henry M. Rowan College of Engineering at Rowan University to address specific science, technology and engineering questions through a partnership model among industry, government, society and academia. The Digital Engineering Hub (DEHub) is the first-ofits-kind academic research and development center where digital engineering methods are researched, practiced, taught, incubated and translated from ideas to commercialized applications.

#### **ORGANIZER AND CONTACT**

**Antonios Kontsos, Ph.D.**, Henry M. Rowan Foundation Endowed Professor & Director of DEHub

Department of Mechanical Engineering, Henry M. Rowan College of Engineering, Rowan University



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## Tuesday, August 26th, 2025 — Rowan Hall Auditorium

TIME	ACTIVITY	PLACE/PERSON
8-9AM	Breakfast & Registration	Rowan Hall Lobby
9-9:10AM	Welcome to HMRCOE	Dean Palmese/HMRCOE
9:10-9:15AM	Welcome to Rowan University	Chancellor Lowman/Rowan University
9:15-9:30AM	Digital Engineering Hub Presentation & Launch Event Purpose	Antonios Kontsos/DEHub
	Industry Perspective on Digital Engineering	Session Chair: Chris Somarakis
9:30-9:45AM	The Evolution of Digital Twins: Driving the Next Phase of Digital Transformation	Dan Isaacs/DTC
9:45-10:00AM	The role and use of Agentic AI in Digital Twins	Pieter Van Schalkwyk /XMPRo
10:00-10:15AM	Model-based Systems Engineering for Digital Twin Development	Greg Porter/Sev1Tech
10:15-10:30AM	Digital Twin at Siemens	Amit Chakraborty/SIEMENS
10:30-10:45AM	Feature and Process Aware Advanced Manufacturing	Fred Carter/DMG MORI
10:45-11:00AM	Cybersecurity Architecture for Innovative Advanced Manufacturing/Digital Engineering Hub	Phillip Susmann/NUARI
11:00-11:20AM	Break	Rowan Hall Lobby
11:20-12:20PM	Panel Discussion (Industry)	Moderator: Pete Mauro
12:20-3:30PM	Lunch	Rowan Hall Lobby
	Government Perspective on Digital Engineering	Session Chair: Shane Esola
1:30-1:45PM	Digital Transformation for Navy Ship Structures	Ben Grisso/NSWC-Carderock
1:45-2:00PM	FAA's Digital Twin Capabilities	Kimberly Gill/FAA
2:00-2:15PM	Enabling the Future Factory: Digital Twin Standards in Digital Manufacturing	Gordon Shao/NIST
2:15-2:30PM	Digital Engineering in Department of Defense	Daniel Hettema/DoD
2:30-3:30PM	Panel Discussion (Government)	Moderator: Stephen Mastro/NSWC-PD
3:30-3:50PM	Break	Rowan Hall Lobby
	Applications of Digital Engineering & Digital Twins	Session Chair: Paromita Nath
3:50-4:05PM	xCognition: A Foundational AI Framework for Real-World Data-Driven Cognitive Control in Industrial Robotics and Automation	Massimiliano Moruzzi/XabaAI
4:05-4:20PM	Digital Twins for Continuous Manufacturing in Pharma: The Case of Dissolved Oxygen Control	Chris Somarakis/Merck
4:20-4:35PM	Digital Twins for Health & Medicine	Eric Stahlberg/UT MD Anderson
4:35-4:50PM	Digital Twins for Energy Infrastructure	Mike Marshall/DRG Tech Solutions
4:50-5:05PM	Smart Infrastructure - Digital Twins	Horst Trattnig/Vallen
5:05-5:20PM	Digital Engineering Skills, Training, and Workforce Development	Melanie Spare/SIEMENS
5:20-5:30PM	Digital Engineering Hub Facilities, Equipment & Resources Description	Antonios Kontsos/DEHub
5:30-7:00PM	DEHub Ribbon Cutting, Tours and Demos —	Rowan Hall 131 & Lobby

**Reception & Dinner** 

