AIA New York

AI+A Series, Part 7: From World Models to the Built World

Saturday, November 21, 12–5pm

Featured Speakers

Brian Ringley, Principal Product Manager, Boston Dynamics
Brian Ringley is a distinguished product manager and HRI designer at Boston Dynamics where he leads agentic AI behavior authoring and digital twin product development for the world's most advanced robots. Before working at Boston Dynamics, he worked as a CNC and industrial robotic arm programmer and machinist, practiced architecture as a façade modeler and BIM software developer, piloted emerging mobile robotics solutions for the commercial real estate market, and commissioned advanced manufacturing lines for industrialized construction.

Alexandros Tsamis, Associate Professor and Director of Center for Architecture Science and Ecology (CASE), Rensselaer Polytechnic Institute (RPI)
Alexandros Tsamis is an architect, researcher, and tenured Associate Professor at Rensselaer Polytechnic Institute (RPI), where he serves as Director of the Center for Architecture Science and Ecology (CASE) and Director of the Built Ecologies M.S. and Ph.D. programs. He holds a Ph.D. in Architecture, Design and Computation and an SMArchS in Design and Building Technology from MIT. His research operates at the intersection of design, computation, and the architectural sciences, investigating the material, energy, and information ecologies of the built environment across scales ranging from objects to territories. His work focuses on advanced composites and climate-adaptive and cyber-physical energy systems. Tsamis has published extensively, led federally and state-funded research initiatives, and contributed to multiple patent applications advancing sustainable building technologies and next-generation ecological systems.

Julian Ocampo, VP of Building Design, ICON
Julian Ocampo is VP of Building Design at ICON, where he leads a team of architects and designers moving large scale 3D printed architecture from research and prototyping into real world building applications. His work bridges digital design and robotic fabrication, using performant, constructible, and scalable 3D printed projects to demonstrate what the technology makes possible. Before ICON, Ocampo was a design leader at BIG–Bjarke Ingels Group, where he collaborated with NASA on Project Olympus and contributed to Mars Dune Alpha, a full scale Martian habitat built at

NASA's Johnson Space Center. His earlier experience spans Diller Scofidio + Renfro, MVRDV, and SelgasCano. Ocampo holds a Master of Architecture from MIT and a Bachelor of Architecture from the University of Waterloo. He lectures internationally on emerging construction technologies and building systems for Earth and space.

Ray Wang, Principal Research Scientist, Autodesk Research

Ray Wang is a Senior Principal Research Scientist with Autodesk Research. Wang's research investigates the intersections between AI, human experience, and carbon within our built environment. His recent work and projects explore agentic AI workflows for AEC through generative, interactive experiences that enable more sustainable, human-centered design. Wang also teaches as an adjunct professor at Columbia University GSAPP.

Robert Stuart-Smith, Associate Professor of Architecture and Design Computing, Georgia Institute of Technology

Robert Stuart-Smith works at the intersection of architecture, artificial intelligence and robotics, exploring how autonomous systems can transform the way we design and build. He is Associate Professor of Architecture and Design Computing at the Georgia Institute of Technology, where he leads the Digital Building Laboratory, and directs the Autonomous Manufacturing Lab across Georgia Tech and University College London, where he is a Principal Research Associate in Computer Science. His multidisciplinary research includes the first demonstration of aerial additive manufacturing, in which autonomous drones 3D-print structures in flight, published in *Nature*. His research has been supported by more than $5.8 million in competitive government funding and a further $1.4 million from industry. Before joining Georgia Tech, Stuart-Smith founded and directed the award-winning Master of Science in Design: Robotics & Autonomous Systems program at the University of Pennsylvania and established its advanced robotic fabrication facility. His work has been exhibited and published internationally, including the books *Behavioural Production* and *Robotic Fabrication & Architectural Design*.

Cristobal Valenzuela, Co-founder and Co-CEO, Runway

Cristóbal Valenzuela is the co-CEO and co-founder of Runway, a global AI research and technology company building foundational AI research models and tools to create real-world superintelligence. Before Runway, Valenzuela was a researcher at NYU Tisch School of the Arts.

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Moderators and Event Organizers

Xenia Adjoubei, Principal, Systematica; Visiting Assistant Professor, Pratt Institute
Xenia Adjoubei is an urban designer, researcher and educator whose work explores how cultural, economic and infrastructural forces shape space and territory. For the past decade, she has led design research projects in collaboration with the Global Free Unit and teaches in the MS Urban Design program at Pratt Institute. Her research has ranged from art as labor, rural urbanism and rewilding to computational infrastructure and new forms of production, including work developed through the Inclusive Ecologies Incubator. Adjoubei is Principal at Systematica, a global mobility planning firm, and co-organizer of the AI+A Salon Series at AIA New York.

Ecem Karaduman, 3D Computer Vision Engineer, Toggle Robotics
Ecem Karaduman is an award-winning architect, computational designer, and researcher currently working as a 3D Computer Vision Engineer at Toggle Robotics, where she develops 3D scanning and computer vision software for automated fabrication quality control. Previously, as Digital Fabrication Lead at Monumental Labs, she developed robotic machining workflows for artistic and architectural production. Her broader practice includes consulting in robotics and computational fabrication. She serves on the board of MIM, the Society of Turkish American Architects, Engineers & Scientists, and is an active member of Women in Robotics and the Wharton Alumni Global AI Studio.

Xinru Liu, Design Technologist, HLW International
Xinru Liu is a New York-based architect and design technologist exploring how AI and immersive technologies can expand architectural practice. She works at HLW International, where she leads research, training, and emerging technology initiatives. Liu co-organizes the AI+A Salon Series with AIA New York's Future of Practice Committee and holds a Master in Design Studies from Harvard Graduate School of Design.

Dennis Shelden, **Associate Professor, Center for Architecture Science and Ecology (CASE), Rensselaer Polytechnic Institute (RPI)**

Dennis Shelden is an Associate Professor at CASE / RPI, where he conducts research, education, and industry leadership in computation and AI applications to building modeling, simulation, and operations. He is a leader in the global building data, AI, smart buildings, and professional practice communities. He teaches entrepreneurship and technology at CASE and the School of Architecture in the undergraduate through PhD programs. Dr. Shelden has been a founder and business leader of building technology companies from startups through Fortune 500, and serves as a mentor for capstone and early-stage technology and entrepreneurship teams across RPI's engineering, computer science and business schools. He has previously held faculty positions at MIT, Georgia Tech, and UCLA, and holds B.S., M.S. and Ph.D. degrees in Architecture, Civil and Environmental Engineering from MIT. He is a licensed architect in California.

List as of 11/9/2026