

Artificial Intelligence in Architecture, Engineering and Construction



March 18-19, 2026

HELSINKI, FINLAND & VIRTUAL

Tuesday, March 17	Get together	19:00	21:00
Wednesday, March 18	Conference day 1 Dinner	08:30 19:30	17:45
Thursday, March 19	Conference day 2	08:15	16:30

PARTNERS





























Wednesday, March 18

BYSA 1-2

BYSA 3

	08:00 Coffee and Exhibition	
08:30	Opening session	08:30
Chair:	Vesa Järvinen, AINS Group / A-Insinöörit, Finland	
08:30	Opening of the AI in AEC 2026 Dr. Vesa Järvinen, AINS Group / A-Insinöörit, Finland	
08:45	Weynote 1 Dr. Sam Zolfagharian Co-Founder & Strategic Advisor YegaTech, United States	
00.70	The Future of AEC Work in an AI-Driven Environment	
09:30	Partner presentations	
	09:40 Coffee and Exhibition	
10:10	Session 1: AI Implementation	10:10
Chair:		
10:10	Opening of the Session	
10:15	A Look at How US State DOT's are Investigating and Implementing AI Solutions Jesse Newberry and Jeff Siegel, HNTB, United States	
10:35	The CEO's AI Playbook Max Levander, AINS Group / A-Insinöörit, Finland	
10:55	Cultivating AI Culture: How Bottom-Up AI Adoption Creates	
	Lasting Transformation in Architecture Nitsan Bartov*, Nicole Vettore** and Ashkan Rezaee*, Henning Larsen, *Denmark **Italy	
11:15	Blueprint for an AI Strategy 5 Steps to Building a Practice-Ready Framework	
11:35	Maria Makri, Dark Design Group, Norway From Resistance to Resilience: Change Management for AI in Practice	
	Erik Stroemberg, HLB Lighting Design, United States	
11:55	Real-World AI in AEC: A Year of Implementation at Proyectos Engineering	
	Joaquin Arocena, Proyectos Engineering, Uruguay	
	12:15 Lunch and Exhibition	
13:15	Session 3: Multi-Agent AI and Workflows	13:15
Chair:		
3:15	Opening of the Session	
3:20		
.5:20	Multi-agent AI Orchestration for Building Management System [BMS] and Project Data Access in AEC Petri Kasari, Sweco, Finland	
13:40	ICE Bot: An AI Agent for Automated and Intelligent Coordination in VDC Projects	
14:00	Alejandro Palpan, GEN+, Peru AI-Driven Multi-Agent System for Automated Structural	
14.00	Engineering Jani Nevalainen, AINS Group / A-Insinöörit, Finland	
14:20	Multi-Agent Systems for Design and Construction Process Optimization	
14:40	Mona Muehlich, Fraunhofer Institute for Solar Energy Systems ISE, Germany The Era of Multi-Agents and Enhanced Collaboration at Scale for Construction Design	
	Henri Pitkänen and Kim Nyberg, Trimble, Finland	
15:00	Multi-Agent AI with Emergent Communication for Adaptive Coordination in Circular Construction Logistics Networks Dr. Nitin Harale, University of Borås, Sweden	
	15:20 Coffee and Exhibition	
15:50	Session 5: Adopting AI Trends	15:50
Chair:		
15:50	Opening of the Session	
.5:55	Generative AI for the Next Generation of Civil Engineers	
16.15	Prof. Giuseppe Carlo Marano, Politecnico di Torino, Italy	
16:15	Keynote 2 Bhragan Paramanantham, AECOM / Last Week in ConTech From Curiosity to Canability Unakilling Tooms for AL Adaption in	
	From Curiosity to Capability: Upskilling Teams for AI Adoption in Construction	
16:45	Panel Discussion: Impact of Agentic AI in AEC Value Chain	
Moderators:	Annina Peisa, RIL / Ramboll, Finland Kalle Valkama, Tyréns, Sweden	
Panelists:	Dr. Sam Zolfagharian, Co-Founder & Strategic Advisor, YegaTech, United States Kim Nyberg, Senior Technology Director, Trimble, Finland Sam Saatchi, Chief Strategy Officer, Sweco, Sweden	
17:45	End of the day 1	

19:30

Dinner at restaurant 10. Kerros



10:10	Session 2: Demos
Chair:	
10:10	Opening of the Session
10:15	Integration of AI in Daily Structural Design Alexey Serous, Sweco, Finland
10:35	Learning AI Assistant for Product Selection in Construction: From Data to Decision Rasmus Paatsalo and Kerkko Niemi, Granlund, Finland
10:55	From Manual Work to Intelligent Automation Stijn Jansen and Peter Madlener, VIKTOR, The Netherlands
11:15	Empowering the Next Generation of Infrastructure Design: AI- driven Workflows for Accelerating Project Delivery Daniel Eng, Bentley Systems, United States
11:35	A.Engineer: Empowering Every Engineer with Generative AI Richard Parker, Tyréns Group / AKT II, United Kingdom
11:55	Empowering Connected Design with Hypar.AI and Revit for Sustainable Development Kuber Kuber, Mott Macdonald, India

13:13	Session 4. At recimiology and Systems
Chair:	
13:15	Opening of the Session
13:20	How Knowledge Graphs Aligns AEC Product Data to Speak AI? Tommi Arola, Building information foundation RTS sr, Otto Alhava, Fira and Tero Järvinen, Granlund, Finland
13:40	Multimodal AI for Construction Monitoring: Baselines, Limitations, and Integration Strategies from the NORMENG Project Kristijan Vilibić, University of Zagreb, Croatia
14:00	Progress Monitoring of Different Elements of Bridges using UAVs and Photogrammetry Aviran Brahma, Indian Institute of Technology Delhi, India
14:20	Arcyn: Explainable AI for Real-Time Building Code Compliance and Design Standards in BIM Boris Levin and Tom Batito, Arcyn AI, EU
14:40	AI and BIM Integration for the Sustainable and Predictive Rehabilitation of 20th century Serial Social Housing Heritage: A State of The Art Review

Aisan Sharifian, Université de Lille, France

12:15

Lunch and Exhibition



15:00

19:30



Agentic vs. Neural Network Comparison for Object Detection in 2D Geometry
Christopher Mouflard, MarkedUp, United States







Dr. Sam Zolfagharian

Thursday, March 19

BYSA 1-2

Coffee and Exhibition

08:15

08:50

10:25

BYSA 3



	07:45 Coffee and Exhibition
08:15	Session 6: Smart Buildings and Cities
Chair:	
08:15	Opening of the Session
08:20	Keynote 3 Prof. Zoltán Nagy
	Chair of Building Services, Eindhoven University of Technology, Founder, Intelligent Environments Laboratory
	AI-Driven Multi-Scale Intelligence: From Occupant-Centric Control to Urban Energy Orchestration
08:55	Deep Reinforcement Learning-Based Real-Time Controller for Energy-Efficient Buildings Mohammad Seyfi, LUT University, Finland
09:15	Talking to and Interpreting Buildings: GraphRAG, Semantic Graphs, and Data Dr. Knut Nordanger, SINTEF Community, Norway
09:35	Data-Driven Spatial Optimization in Smart Buildings Using Digital Twin Feedback Loops and AI Simulation Babak Ehsani, Istanbul Aydin University, Turkey

10:25 Session 8: Sustainable Business Models Chair: 10:25 Opening of the Session AI for Productivity and Better Outcomes in the Built Environment 10:30 Bart Brink, TKI Bouw en Techniek, The Netherlands 10:50 AI Playbook for AEC-sector - Organisation tool to AI Localisation Tommi Arola, Building information foundation RTS sr, Joonas Lehtovaara and Pieti Marjavaara, AINS Group / A-Insinöörit, Finland 11:10 Business Model Innovation of AEC Consultancies in the AI Era Rich Synott, Arup, United Kingdom Designing New Business Models in the AEC: AI as a Catalyst for $\,$ 11:30 Business Model Innovation and Transformation Petra Svensson Gleisner, IHOP, Ivana Kildsgaard, Tengbom and Caroline Bernelius Cronsioe, BRIAB, Sweden Standardized Data and Artificial Intelligence as Enablers of Data 11:50 **Economy in Building Services Engineering** Prof. Piia Sormunen and Dr. Osku Torro, Tampere University, Finland Mind the Gap: Transforming AEC Project Data into a Living 12:10 **Knowledge Base**

Pavlina Nikolova, Egnyte, United Kingdom

12:30 Lunch and Exhibition 13:30 Session 10: Computational Design Chair: Opening of Session 13:30 Enabling Data-Driven Design Through a Feedback-Driven 13:35 Semantic Layer for AEC Shicong Cao, DataDrivenAEC, Germany Advancing AI-Driven Automation in Infrastructure Design 13:55 Ramiz Mohareb and Dirk Münzner, BuP. Boll Beraten und Planen, Germany 14:15 Quacky: Shaping the Future of Computational Design with AI Kristoffer Berglund and Tuomo Palomaa, Ramboll, Finland Enhancing Design Workflows with Computer Vision: Case Studies 14:35 in Concrete and Wood Truss Analysis Joonas Helminen, Sweco, Finland From Markup to Verification: An AI Tool for Automated Rebar 14:55 Drawing QA/QC Manoj Bala Radhakrishna, struct.digital, United Kingdom Predictive Analytics for Daylight Factor: Real-Time Machine 15:15 Learning Integration in Architectural Workflows Alejandro Pacheco Diéguez, Upskiller.xyz, Sweden

> 15:35 Coffee and Exhibition

15:50

13:30

Keynote 4 Prof. Sigrid Brell-Cokcan Director of Individualized Production, RWTH Aachen University President of the Association for Robots in Architecture 5G, AI and Construction Robotics for the Construction Site of the

16:20 Closing Words

15:50

Chair:

15:50

Dr. Vesa Järvinen, AINS Group / A-Insinöörit, Finland

Vesa Järvinen, AINS Group / A-Insinöörit, Finland

16:30 End of AI in AEC 2026

Closing session

Session 7: Climate Technology 08:50 Chair: 08:50 Opening of the session Combining Thermal Satellite Imagery, Segmentation, and Vision-08:55 LLMs to Automate Large Scale Urban Heat Island Analysis Dr. Rania Labib, Prairie View A&M University, United States An AI-Driven WhatsApp-Based Chatbot for Participatory Disaster 09:15 Awareness and Early Warning to Strengthen Disaster Risk Reduction Dr. Amila Jayasinghe, University of Moratuwa, Sri Lanka Master Thesis: AI-Driven Winter Road Maintenance: A Roadmap 09:35 for Municipal Decision Support

Roope Palomaa, Ramboll, Finland

		09:55	Coffee and Exhibition
10:25	Session 9: Conseptual Design		
Chair:			
10:25	Opening of the Session		
10:30	Artificial Intelligence, Creativi Design Prof. Marco Maretto, University of P	-	wledge in Architectura
10:50	Predictive Design: Learning Sp Site Planning Dylan Wichman, Bentley Systems, U		s to Guide Conceptual
11:10	ArchiEstimate: AI-Powered Pr Practices Kubilay Şahinler, Trelity, Turkey	oposal Esti	mation for Architectura
11:30	AI in Architecture: Evaluating Prototype Development for Sch Seeja Sudhakaran, University of Wes	iool Buildin	ıg Design
11:50	AI-Enhanced Visualization for Dr. Mauri Laasonen . Tampere Universität		-
12:10	AI-Driven Circular Workspace Reversibility by Design Dr. Mikhael Johanes, ETH Zurich, Sw		daptability and

12:30 Lunch and Exhibition 13:30 **Session 11: Construction** Chair: 13:30 Opening of the Session 13:35 AI Control Tower for AEC: From Estimates to Cost Certainty **Robin Patra**, Keeley Companies, United States From Checklists to Agents: AI for HSE in Construction 13:55 Guido Maciocci, AECFoundry, Italy Beyond Rework: Predicting Construction Errors with AI 14:15 Dr. Roxi Mkhani, Kingston University London, United Kingdom 14:35 Reinventing Construction Estimation: AI-Powered Takeoffs to Solve the Industry's Labor Crisis **Tommy Whitehead, TomCo Solutions, United States** Bric-a-Brick: Vision-Driven Human-Robot Collaboration for 14:55 Ergonomic Bricklaying Prof. Pierpaolo Ruttico, INDEXLAB - Politecnico di Milano, Italy 15:15 Future of Organizations in Construction Management - Hybrid Human-Technology-AI Teams Karoliina Alatalo, AINS Group / A-Insinöörit, Finland

> Coffee and Exhibition 15:35

