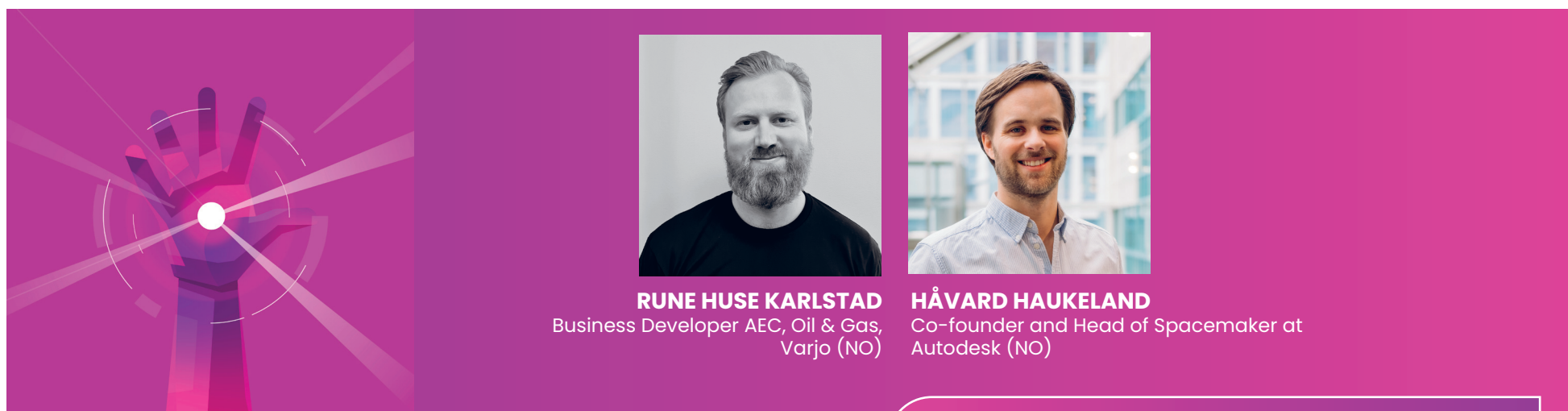


WD BE

2021

UNLOCKING
URBAN
SUPERSENSING



RUNE HUSE KARLSTAD
Business Developer AEC, Oil & Gas,
Varjo (NO)

HÅVARD HAUKELAND
Co-founder and Head of Spacemaker at
Autodesk (NO)

TUESDAY
September 28
VIRTUAL SUMMIT wdbe.org

9.00

MORNING GET-TOGETHER
– open chat room for all attendees

9.30–10.00

BREAKOUT ROOM: Find your next opportunity in Helsinki, hosted by
Helsinki Business Hub's **Irma Ylikangas**, Senior Business Advisor | **Sonja Malin**, Senior Business Advisor

All times are EEST

Stream 1

Stream 2

10.00–14.15

MORNING SESSION

10.00

OPENING OF THE SUMMIT hosted by Helsinki

10.10

KEYNOTE 1 RUNE HUSE KARLSTAD (Varjo)
Practical use of XR and the future metaverse in AEC

10.25

KEYNOTE 2 HÅVARD HAUKELAND (Spacemaker)
How early phase analytics bring business value in real estate development

10.40

SHARED Q&A

10.55

NETWORKING BREAK

11.15–12.45

COMMUNITY SESSION 1

Common language and data platforms

Moderator: Jaan Saar, Estonian Ministry of Economic Affairs & Communications, Estonia

11.15

E-construction Platform Implementation
Taavi Jakobson, Estonian Ministry of Economic Affairs & Communications, Estonia

11.30

Digitizing spatial planning field
Kermo Mägi, Estonian Ministry of Finance, Estonia

11.45

National Digital Twin
Ingrid Aasoja-Zverev, Estonian Ministry of Economic Affairs & Communications, Estonia

12.00

Defining the National Information System for the built environment in Finland
Tiina Perttula, Ramboll, Finland

12.15

Czech Data Construction standard (DSS) and classification system (CCI) – principles, vision and actual status
Jaroslav Nechyba, Czech Agency for Standardization, Czech Republic

12.30

Data and application sharing and collaboration for the building energy domain
Nikos Sakkas, APINTECH LTD, Cyprus

COMMUNITY SESSION 2

Smart and sustainable cities

Moderator: Hele-Mai Metsal, Port of Tallinn, Estonia

Accelerating sustainability in cities by digital tools
Suvi Monni, Sitowise, Finland
Sauli Heino, Sitowise, Finland

Supersensing of the Units of National Built Environments On Real-Time Enabled by Digitalization
Pekka Huovinen, Business Management PJH, Finland

Smart Infrastructure as a cornerstone of Smart City
Samuli Virtanen, Sitowise, Finland

What's AI's role in creation of sustainable societies?
Janne Liuttu, Ramboll, Finland

Maptionnaire – Insights that enable cities to change
Anna Broberg, Mapita Oy, Finland

Is Smart City the next moon shot?
Kalle Nieminen, Sitowise, Finland

12.45

NETWORKING & LUNCH BREAK



DANIELLE DY BUNCIO
Co-founder & CEO, VIATechnik (US)



LORRI ROWLANDSON
Senior Vice President of Strategy and Innovation, BGIS (CAN)

13.15 – 14.15

PUBLIC SECTOR PANEL (FINLAND, ESTONIA AND DENMARK)

JUHANA RAUTIAINEN, Ministry of the Environment, Finland
TAAVI JAKOBSON, Ministry of the Economic Affairs and Communication, Estonia
MICHAEL FRIIS ØRSTED, Buildings Department of the City of Copenhagen, Denmark

Moderator: Aarni Heiskanen & Paul Wilkinson, AEC TechTV

INTRODUCTION TO THE HELSINKI ECOSYSTEM – NEW BUILT ENVIRONMENT OPPORTUNITIES

IRMA YLIKANGAS, Senior Business Advisor,
SONJA MALIN, Senior Business Advisor,
LAURI LEMMENLEHTI, Natural Environment Digitalization Expert, Helsinki Business Hub

14.15 NETWORKING BREAK

15.00 – 15.45

Digital sensors can make construction more sustainable
Casper Bernhøj Harlev, Sensohive | **Rebekka Pallesen**, HD Lab | **Lars Andersen**, NCC

16.30–17.00

BREAKOUT ROOM: Find your next opportunity in Helsinki, hosted by Helsinki Business Hub’s **Irma Ylikangas**, Senior Business Advisor | **Sonja Malin**, Senior Business Advisor

All times are EEST

Stream 1

Stream 2

17.00–20.00

EVENING SESSION

17.00

Opening of the evening session

17.10–18.45

COMMUNITY SESSION 3

Hybrid work and smart facilities management

Moderator: Kaia Kirs, Reminet Ltd, Estonia

COMMUNITY SESSION 4

Optimizing design and project management

Moderator: Teemu Lehtinen, KIRAHub, Finland

17.10

Shaping Human Experience – A focus on hybrid work and four emerging worker profiles
Sofia Jakas, Jones Lang LaSalle Finland Oy, Finland

A comprehensive twin-based Building Design Health Check
Christian Schunicht, Twingine, Germany

17.25

Decision Support System based on Occupancy-Oriented Digital Twin for Facility Management
Laura Pellegrini, Politecnico di Milano, Italy

Calculation of the Smart Readiness Indicator for a sample of buildings in South Tyrol
Ulrich Klammsteiner, Agentur für Energie Südtirol – KlimaHaus, Italy

17.40

BIMLIFE Platform: An ecosystem of multiple digital twins for building operations
Francisco Forns-Samso, Granlund, Finland

Urban spatial sensing for social inclusion and disruption of the limits
Lavinia Chiara Tagliabue, University of Turin, Italy

17.55

Technology in built environment – the dependencies in an environment enabling all the smart solutions
Hanna Pikkusaari, Osaango, Finland

Collaborative project risk management and benchmarking
Sami Kärnä, Inclus, Finland

18.10

Futureproofing and scaling machine learning for occupancy prediction
Davor Stjelja, Granlund Oy, Finland

Iffent – automated design team assembly!
Paavo Pärn, Iffent, Estonia

18.25

Wayfinder in complex construction areas
Merja Taipaleenmäki, Citynomadi, Finland

Circular 369 Pattern Buildings
Renee Puusepp, Estonian Academy of Arts, Estonia

18.45 NETWORKING BREAK

19.00–20.00

KEYNOTE SESSION

19.00

KEYNOTE 3 LORRI ROWLANDSON (BGIS)
The Digital “Office” – How data is transforming the built environment and the way we work

19.15

KEYNOTE 4 DANIELLE DY BUNCIO (VIATechnik)
Digital Transformation – From Ideas to Action

19.30

SHARED Q&A

19.45

CLOSING OF THE DAY I

20.00

EVENING GET-TOGETHER – open chat room for all attendees



SOFIE PELSMAKERS
Assistant Professor, Sustainable
Architecture and Sustainable Housing Design,
Tampere University (FI)



JEFF SCHUMACHER
Real Estate and Security Regional Lead
– Ireland, UK, & MEA at Microsoft

WEDNESDAY
September 29
VIRTUAL SUMMIT wdbe.org

9.00 **MORNING GET-TOGETHER** – open chat room for all attendees

9.30–10.00 **BREAKOUT ROOM: Find your next opportunity in Helsinki**, hosted by
Helsinki Business Hub's [Irma Ylikangas](#), Senior Business Advisor | [Sonja Malin](#), Senior Business Advisor

All times are EEST

Stream 1

Stream 2

10.00–14.15 **MORNING SESSION**

10.00 **OPENING OF THE DAY 2** hosted by Copenhagen

10.10 **KEYNOTE 5** JEFF SCHUMACHER (Microsoft)
Impact of data-driven workplace experience

10.25 **KEYNOTE 6** SOFIE PELSMAKERS (TUNI)
Sustainable architecture & housing design

10.40 **SHARED Q&A**

10.55 **NETWORKING BREAK**

COMMUNITY SESSION 5

11.15–12.45 **Sustainable buildings and circular economy**
Moderator: [Jakob Norman-Hansen](#), BLOXHUB, Denmark

11.15 **Boosting Sustainability: The Role of Sensing and Data Analytics in Operating and Maintaining Built Assets**
[Susanne Knorr](#), Arcadis, United Kingdom

11.30 **The environmental impact of integrating Building Information Modelling (BIM): A systematic review and case study**
[Marie-France Stendahl](#), Lund University, Sweden

11.45 **Nordic Swan Ecolabelling of buildings**
[Riikka Holopainen](#), Ecolabelling Finland, Finland

12.00 **Four challenges of real assets' lifecycle valuation**
[Katja Rodionova](#), Sitowise, Finland

12.15 **Enabling Circularity: a Dutch Case Study on the Circular Economy Platform**
[Jenny Heikinheimo](#), University of Amsterdam, Netherlands

12.30 **Networking break**

12.45 **NETWORKING & LUNCH BREAK**

13.15– 14.15 **Hackathon Session**

Highlights from Digital Construction 2021 Hackathon moderated by [Joao Rei](#), Garage48

14.15–14.45 **BREAKOUT ROOM: Find your next opportunity in Helsinki**, hosted by
Helsinki Business Hub's [Irma Ylikangas](#), Senior Business Advisor | [Sonja Malin](#), Senior Business Advisor

14.15 **NETWORKING BREAK**



AVIAD ALMAGOR
Division Vice President,
Emerging Technologies, Trimble (US)



BRIAN RINGLEY
Construction Technology Manager,
Boston Dynamics (US)

All times are EEST

Stream 1

Stream 2

17.00–20.00 EVENING SESSION

17.00 OPENING OF THE EVENING SESSION hosted by Helsinki

COMMUNITY SESSION 7

17.10 – 19.00 Mixed reality for AEC and nature

Moderator: **Tuija Pakkanen**, Ministry of Environment, Finland

17.10 Let's Play the AEC Game
Jarkko Männistö, Sitowise, Finland

17.25 New technology boosts efficiency of augmented reality
Adrian Merkel, FRAMENCE GmbH, Germany

17.40 Decision.City
Pedro Aibeo, Architectural Democracy, Finland

17.55 Modelling urban green for digital twins
Lauri Lemmenlehti, Forum Virium Helsinki, Finland

18.10 Crafting a Virtual Nature Concept – A case example of Aukio
Aki Päivärinne, Granlund Oy, Finland
Sami Kämppi, OiOi Collective, Finland
Jenni Herkama, Rune & Berg Design Ltd, Finland

18.25 GreenTwins: New tools for collaborative planning of green environments
Pilvi Nummi, Aalto University, TalTech, Finland
Henna Fabritius, TalTech, Finland
Petri Kangassalo, Aalto University, Finland
Viktorija Prilenska, TalTech, Estonia

COMMUNITY SESSION 8

Future technology-driven business models

Moderator: **Sami Lankiniemi**, KIRAHub, Finland

The Future of Architecture and the World of the Digital Built Environment
Terry Beaubois, BKS: Building Knowledge Systems, United States

4V's of Digital Twin Business Models
Erika Parn, University of Cambridge, United Kingdom

Data insights to drive real estate decisions
Natalia Rincon, CHAOS Architects, Finland

Probabilistic Blockchains: Political Gridlock And A Path Towards Open Finance in P3 Infrastructure
Aktham Dabbas, Austin Technology Incubator, United States

Urban energy systems' digital twin for multi-objective optimization as a basis for collaborative decision making
Alice Chevrier, Urban Symphony AG, Switzerland

Case YIT Workery+ - The Smartest Building of 2021 and a new business model combining co-working and flexible office leases for the new hybrid workplace
Anders Stenbäck, YIT, Finland

18.40 NETWORKING BREAK

19.00–20.00 KEYNOTE SESSION

19.00 **KEYNOTE 7 AVIAD ALMAGOR (Trimble)**
On-site supersensing and the future of automation: discussing construction, robotics, and contemporary data capture

19.15 **KEYNOTE 8 BRIAN RINGLEY (Boston Dynamics)**
Closing the loop: discussing automation and realtime supersensing

19.30 SHARED Q&A

19.45 CLOSING OF THE SUMMIT

20.00 **EVENING GET-TOGETHER** – open chat room for all attendees