

3DBODY.TECH 2021 - PROGRAM



12th 3DBODY.TECH Conference & Expo

Lugano, Switzerland · 19-20 October 2021

Program Outline

3DBODY.TECH 2021 ONSITE + ONLINE, Lugano, Switzerland, 19-20 October 2021, www.3dbody.tech 12th International Conference and Exhibition on 3D Body Scanning and Processing Technologies CEST (Central European Summer Time) UTC+2 - Time Zone Zurich/Rome/Paris/Berlin/Madrid				
Time	Tuesday 19 October 2021		Wednesday 20 October 2021	
08:00	Registration		Registration	
09:00	Opening Session		Exhibition Onsite Online	Exhibition Setup
10:00				Exhibition Onsite Online
11:00				Onsite Exhib. Live Stream 3
12:00	Coffee Break / 1-on-1 Networking		Coffee Break / 1-on-1 Networking	
13:00	Technical Session 1 3D Body Scanning for Health & Sport 1	Technical Session 2 3D Body Scanning for Apparel 1	Technical Session 7 3D Body Scanning for Health & Sport 2	Technical Session 8 3D Body Scanning for Apparel 2
14:00	Lunch Break 1-on-1 Networking		Lunch Break 1-on-1 Networking	
15:00	Technical Session 3 3D Face & Head Scanning	Technical Session 4 3D Body Scanning Systems 1	Technical Session 9 3D Body Processing	Technical Session 10 3D Body Scanning Systems 3
16:00	Coffee Break / 1-on-1 Networking		Lunch Break 1-on-1 Networking	
17:00	Technical Session 5 3D Hand & Foot Scanning	Technical Session 6 3D Body Scanning Systems 2	Technical Session 11 3D Body Scanning in Medicine 1	Technical Session 12 4D Body Scanning for Apparel
18:00	Coffee Break / 1-on-1 Networking		Coffee Break / 1-on-1 Networking	
19:00	Welcome Cocktail 1-on-1 Networking		Post-conference 1-on-1 Networking	
			Closing Session	
			Onsite Exhibition Breakdown	

Conference Office

Conference office: HOMETRICA CONSULTING - Dr. Nicola D'Apuzzo
Contrada Maggiore 2, CH-6612 Ascona, Switzerland
Conference website: www.3dbody.tech info@3dbody.tech
Conference phones: +41.91.791.5524



3DBODY.TECH 2021 - PROGRAM



12th 3DBODY.TECH Conference & Expo

Lugano, Switzerland · 19-20 October 2021

Tuesday 19 October 2021 - CEST (Central European Summer Time) UTC+2 - TimeZone Zurich/Rome/Paris/Berlin/Madrid

08:00-09:30 Registration – Welcome Desk / Pre-conference 1-on-1 Networking

09:30-10:40 Opening Session – Room B1 / Track 2 Blue

09:30 Welcome Speech from the Conference Director
Nicola D'APUZZO, Hometrica Consulting, Switzerland

09:50 World Premieres, Product Launches and Announcements from GOLD & SILVER Exhibitors
3dMD, SizeStream/ShapeAnalysis, VIALUX, botspot, Renderpeople, Avalution, Esenca



10:40-11:20 Coffee Break – Foyer / 1-on-1 Networking

11:20-12:50 Technical Session 1: 3D Body Scanning for Health & Sport 1 – Room C / Track 1 Green

Session Chair: Dr Sandino MORALES - Senior Perception Engineer at aescape, Mexico

11:20 Evaluating the Accuracy of an Hallucinatory Algorithm to Predict Body Shape Changes from Dieting and Physical Activity
John A. SHEPHERD 1, Michael WONG 2, Isaac TIAN 3, Yong En LIU 1, Samantha KENNEDY 4, Dylan LOWE 5, Nisa KELLY 1, Julia MW. WONG 6, Cara B. EBBELING 6, David S. LUDWIG 6, Ethan WEISS 5, Brian CURLESS 3, Steve B. HEYMSFIELD 4
1 Dept. of Epidemiology and Population Sciences, Univ. of Hawaii Cancer Center, Honolulu HI, USA; 2 Dept. of Nutrition Sciences, Univ. of Hawaii Cancer Center, Honolulu HI, USA; 3 Dept. of Computer Science, Univ. of Washington, Seattle WA, USA; 4 Pennington Biomedical Research Center, Baton Rouge LA, USA; 5 Cardiovascular Research Institute, Univ. of California, San Francisco CA, USA; 6 New Balance Foundation Obesity Prevention Center, Boston Children's Hospital and Department of Pediatrics, Harvard Medical School, Boston MA, USA #43

11:42 Predicting Muscular Strength with 3D Optical in a Diverse Adult Population
Devon CATALDI 1, Jonathan BENNETT 1, Brandon QUON 1, Yong En LIU 1, Nisa KELLY 1, Steve HEYMSFIELD 2, John A. SHEPHERD 1
1 University of Hawaii Cancer Center, Honolulu HI, USA; 2 Pennington Biomedical Research Center, Baton Rouge LA, USA #38

12:04 Anthropometric Evaluation of a 3D Scanning Mobile Application
Brooke SMITH, Marcelline DECHENAUD, Steven B. HEYMSFIELD
Louisiana State University, Pennington Biomedical Research Center, Baton Rouge LA, USA #33



12:26 Health and Telemedicine Applications of 3D Body Scanning with Mobile Devices
David BRUNER
Size Stream LLC, Cary NC, USA #59



11:20-12:50 Technical Session 2: 3D Body Scanning for Apparel 1 – Room B1 / Track 2 Blue

Session Chair: Michela ORNATI - Lecturer at SUPSI University of Applied Sciences and Arts of Southern Switzerland

11:20 Development of an Easy Mobile Smartphone-Based Image Capturing System for Avatar Production for Garment Manufacturing
Verena ZIEGLER, Felix HINDERER, Frauke LINK
OpenDress GmbH, Konstanz, Germany #52



11:42 "PS for You": A Contactless, Remote, Cloud-Based Body Measurement Technology Powered by Artificial Intelligence
Francesca DONADONI 1, Jayne MECHAN 2, Colette JOHNSON 1
1 The PS Collective LLC, New York City NY, USA; 2 Department of Apparel, Manchester Metropolitan University, UK #31



12:04 Online Shopping Featuring "My Customized Avatar" - Generating Customized Avatars for a Sustainable Shopping Experience in E-Commerce
Michael ERNST, Antje CHRISTOPHERSEN, Silke SANDULOFF
Niederrhein University of Applied Sciences, Germany #34

12:26 ESENCA - A Fit Predictor Built for the 21st Century
Eduard COJOCEA
ESENCA, Lisbon, Portugal #62



12:50-14:20 Lunch Break – Foyer / 1-on-1 Networking

13:00-14:10 Remote Exhibitors Live Stream 1 – Track 3 Rose

13:00-13:30 Live Demonstration & Presentation from Thor 3D, Moscow, Russia



13:40-14:10 Live Demonstration & Presentation from Size Stream LLC, Cary NC, USA



14:20-15:50 Technical Session 3: 3D Face & Head Scanning – Room C / Track 1 Green

Session Chair: Antonio DIAS - Director of Engineering at Hanger Inc., USA

14:20 3D Face Scanner Comparison: Visual and Anthropometric Accuracy Analysis

Minji YU, Alison CLOET, Linsey GRIFFIN
University of Minnesota, St. Paul MN, USA #41

14:42 3D Anthropometry and Mask Fit: New Analysis Methods to Aid Prediction



Linsey GRIFFIN, Minji YU, William DURFEE, Alison CLOET, Jessica ARNOLD
University of Minnesota, St. Paul MN, USA #45

15:04 Respirators, Face Masks, and Diverse Populations: An Analysis of 3D Facial Anthropometrics



Kayna HOBBS-MURPHY 1, Kristen MORRIS 2, Bill BRAZILE 1, John ROSECRANCE 1
1 Department of Environmental and Radiological Sciences, College of Veterinary Medicine and Biomedical Sciences, Colorado State University, Fort Collins CO, USA;
2 Dept. of Design and Merchandising, College of Health and Human Sciences, Colorado State University, Fort Collins CO, USA #60

15:26 Exemplar 3D Faces and N95 Pleated Mask Measurement by Sex and Race



Susan L. SOKOLOWSKI 1, Jacob A. SEARCY 2, Daniel CALABRESE 1, Yu ZOU 1
1 Sports Product Design, University of Oregon, Portland OR, USA; 2 Data Science, University of Oregon, Eugene OR, USA #40

14:20-15:50 Technical Session 4: 3D Body Scanning Systems 1 – Room B1 / Track 2 Blue

Session Chair: Tim GUENZEL - Senior Consultant Body Scanning at Human Solutions of North America Inc., USA

14:20 To MOVE4D, or not to Move, that is the Question



Alfredo BALLESTER, Eduardo PARRILLA, Ana V. RUESCAS, Jordi URIEL, Sandra ALEMANY
IBV Instituto de Biomecánica de Valencia, Universitat Politècnica de València, Spain #48



14:42 3D Body Scanning, Size Surveys and Avatar Generation as Door Openers for 3D Apparel Product Development

Anke RISSIEK
Avalution GmbH, Kaiserslautern, Germany #53



15:04 Mobile Scanning Improvements from Size Stream



Warren WRIGHT
Size Stream LLC, Cary NC, USA #58



15:26 Integrated Head, Face, Ear, Hand, Foot and Body 4D Enrollment Strategies



Chris LANE
3dMD Ltd., London / Atlanta GA, UK / USA #01



14:45-15:15 Onsite Exhibitors Live Stream 1 – Track 3 Rose

14:45-15:15 Live Demonstration & Presentation - ESENCA, Portugal



15:50-17:10 Coffee Break – Foyer / 1-on-1 Networking

16:00-17:00 Remote Exhibitors Live Stream 2 – Track 3 Rose

16:00-16:20 Live Demonstration & Presentation from 3dMD Ltd., Atlanta GA, USA



16:30-17:00 Live Demonstration & Presentation from from IBV, Valencia, Spain



17:10-18:40 Technical Session 5: 3D Hand & Foot Scanning – Room C / Track 1 Green

Session Chair: Pieter SMAKMAN - CEO at Manometric, The Netherlands

17:10 Estimating Footwear Fit by Using 3D Foot Scans of Shoe Shoppers

Ales JURCA 1,2, Sašo DŽEROSKI 2,3
1 Volumental AB, Stockholm, Sweden; 2 Jožef Stefan International Postgraduate School, Ljubljana, Slovenia;
3 Jožef Stefan Institute, Ljubljana, Slovenia #51

17:32 Foot Measurements Using Mobile Devices and Typical Pitfalls



Konstantin SEMIANOV, Anton LEBEDEV
Neatsy Inc., Santa Clara CA, USA #30

17:54 Visual Analysis within 3D Hand Scanning to Ensure the Reliability and Precision of Anthropometric Data Collection

Emily SEIFERT, Linsey GRIFFIN
University of Minnesota, St. Paul MN, USA #42

18:16 A Novel Approach for Determining Glove Area Factors Based on the 3D Scanning Technology

Mengying ZHANG 1,2, Rui LI 1, Ankit Joshi 1, Yulin WU 1, Guowen SONG 1
1 Iowa State University, Ames, Iowa, USA; 2 College of Fashion and Design, Donghua University, Shanghai, China #27

17:10-18:40 Technical Session 6: 3D Body Scanning Systems 2 – Room B1 / Track 2 Blue

Session Chair: Dr Thomas JENSEN - Head R&D Photonics at Hexagon Technology Center, Switzerland

17:10 HumanDataset - World's Most Popular 3D Human Datasets

Lukas LAMPRECHT
Renderpeople GmbH, Köln, Germany #56



17:32 Guidelines and Standards for Calibrated Millimeter Accurate Measurements in 3D Body Scans

Ken VARNER
botspot AG, Berlin, Germany #15



17:54 IO Industries Volucam Cameras - for Multi-Camera Video Recording Solutions



Andrew SEARLE
IO Industries Inc., London ON, Canada #18

17:45-18:15 Onsite Exhibitors Live Stream 2 – Track 3 Rose

17:45-18:15 Live Demonstration & Presentation - Avalution GmbH, Germany



18:40-21:00 Welcome Cocktail / 1-on-1 Networking

Wednesday 20 October 2021 - CEST - UTC+2 - Time Zone Zurich/Rome/Paris/Berlin/Madrid

08:00-08:50 Registration – Welcome Desk / 1-on-1 Networking

08:50-10:40 Technical Session 7: 3D Body Scanning for Health & Sport 2 – Room C / Track 1 Green

Session Chair: Chris LANE - CEO at 3dMD Ltd., UK / USA

08:50 3D Optical Body Composition Accuracy across Subgroups of BMI and Race/Ethnicity

Michael C. WONG 1,2, Yong En LIU 2, Samantha F. KENNEDY 3, Nisa N. KELLY 2, Gertraud MASKARINEC 2, Andrea K. GARBER 4, Julia MW. WONG 5, Cara B. EBBELING 5, David S. LUDWIG 5, Ethan WEISS 4, Sergi PUJADES 6, Steven B. HEYMSFIELD 3, John A. SHEPHERD 2
1 Graduate Program in Human Nutrition, University of Hawai'i Manoa, Honolulu HI, USA; 2 University of Hawai'i Cancer Center, Honolulu HI, USA; 3 Pennington Biomedical Research Center, Louisiana State University, Baton Rouge LA, USA; 4 University of California, San Francisco CA, USA; 5 Boston Children's Hospital, Boston MA, USA; 6 Inria, University of Grenoble Alpes, CNRS, Grenoble INP, LJK, Grenoble, France #36

09:12 Accessible Five Compartment Body Composition via 3-Dimensional Imaging and Bioelectrical Impedance

Jonathan P. BENNETT, Devon CATALDI, Brandon K. QUON, Yong En LIU, Nisa N. KELLY, Tom KELLY, Steven B. HEYMSFIELD, Andrea K. GARBER, Ethan J. WEISS, John A. SHEPHERD
University of Hawaii Cancer Center, Honolulu HI, USA #39

09:34 Creating Accurate Representations of DXA Scans from 3D Optical Body Surface Scans Using Deep Learning



Lambert T. LEONG 1,2, Michael C. WONG 1, Yong En LIU 1, Nisa N. KELLY 1, Michaela PIAZZA 3, Siobhan GARRY 4, Steve B. HEYMSFIELD 5, John A. SHEPHERD 1
1 University of Hawaii Cancer Center, Honolulu HI, USA; 2 University of Hawaii at Manoa, Honolulu HI, USA; 3 National Institute of Allergy and Infectious Diseases, Bethesda MD, USA; 4 Hologic Inc., Santa Clara CA, USA; 5 Pennington Biomedical Research Center, Baton Rouge LA, USA #35

09:56 A Deep CNN Model for Inferring 3D Human Body Shapes Using Front and Side Images



Elena ÁLVAREZ DE LA CAMPA CRESPO, Bernhard SPANLANG
Virtual Bodyworks S.L., Barcelona, Spain #32

08:50-10:40 Technical Session 8: 3D Body Scanning for Apparel 2 – Room B1 / Track 2 Blue

Session Chair: Michela ORNATI - Lecturer at SUPSI University of Applied Sciences and Arts of Southern Switzerland

08:50 How the Utilisation of 3D Body Scanners Enhance the Construction of Traditional Sawwan Garments

Faizah ALMALKI, Simeon GILL, Steven G. HAYES, Lisa TAYLOR
The University of Manchester, Manchester, UK #49

09:12 The Efficiency of Programs to Determine the Appropriate Size of the Pre-Ordered Product

Miad ALJAYZANI, Steven G. HAYES, Simeon GILL
The university of Manchester, Manchester, UK #11

09:34 Diversity Sizing - How Different or Similar are European Women and Men?

Magdalena MANDALKA, Anke RISSIEK
Avalution GmbH, Kaiserslautern, Germany #54



09:56 Reclassification of South African Hourglass and Pear-Shaped Women for Apparel Sizing and Fit

Phumza SOKHETYE, Anne MASTAMET-MASON
Tshwane Univ. of Technology, Faculty of Arts and Design, Dept. of Design Studies, Fashion Design & Tech., Pretoria, South Africa #05

10:18 One Avatar, Two Level of Detail, One Result? - Analyzing the Effect of Low and High Detailed Avatars on Fitting Simulations

Christian PIRCH, Oliver KAUSCH, Anke KLEPSEK, Simone MORLOCK
Hohenstein Laboratories GmbH & Co. KG, Bönnigheim, Germany #46

09:45-10:15 **Onsite Exhibitors Live Stream 3 – Track 3 Rose**

09:45-10:15 Live Demonstration & Presentation - ViALUX GmbH, Germany



10:40-11:20 **Coffee Break - Foyer / 1-on-1 Networking**

10:45-11:15 **Remote Exhibitors Live Stream 3 – Track 3 Rose**

10:45-11:15 Live Demonstration & Presentation from from IBV, Valencia, Spain



11:20-12:50 **Technical Session 9: 3D Body Processing – Room C / Track 1 Green**

Session Chair: Gerald RUDERMAN - Chief Designer at Zdoit, USA

11:20 Creating Lifelike Digital Humans for Everyone
Naureen MAHMOOD, Ben KILGORE
Meshcapade GmbH, Tuebingen, Germany #07



11:42 3D Body Processing Interoperability, State of the Art and Outstanding Issues
Carol MCDONALD 1, Nick CLAYTON 2, Andrey GOLUB 3
1 Gneiss Concept, Washougal WA, USA; 2 Savitude Inc., Ann Arbor MI, USA; 3 ELSE-Corp, Milan, Italy #09


12:04 Landmarking for 3D Body Scanning, Moving Manual Practices Into a Digital Realm
Simeon GILL 1, Carol MCDONALD 2, Emma SCOTT 3, Alfredo BALLESTER 4,
Anke KLEPSE 5, Inga DABOLINA 6, Gerald RUDERMAN 7, Dinesh K. PAI 8,9
1 The University of Manchester, Manchester, UK; 2 Gneiss Concept, Washougal WA, USA; 3 Fashion Should Empower Research Group,
BC, Canada; 4 Instituto de Biomecánica de Valencia, Universitat Politècnica de València, Spain; 5 Hohenstein Laboratories, Germany;
6 Research Laboratory of Ergonomics Electrical Technologies, Riga Technical University, Latvia; 7 Zdoit, Princeton NJ, USA;
8 University of British Columbia, Vancouver BC, Canada; 9 Vital Mechanics Research, Vancouver BC, Canada #10

12:26 Post-Evaluation of 3D Body Scans from Worldwide Surveys
Michael STOHR
Avalution GmbH, Kaiserslautern, Germany #55



11:20-12:50 **Technical Session 10: 3D Body Scanning Systems 3 – Room B1 / Track 2 Blue**

Session Chair: Dr Fredrik GUNDELSWEILER - Principal Consultant at Zühlke Engineering AG, Switzerland

11:20 The Downstream World of Precision 4D Capture - Exploiting all that Rich Data
 Chris LANE
3dMD Ltd., London / Atlanta GA, UK / USA #02



11:42 Calibry: 3D Scanning in Sports and Games
Vadim FOMICHEV
Thor 3D, Moscow, Russia / Calibry International UG, Dusseldorf, Germany #04




12:04 From Digital to Digital: The Importance of Post Scanning Treatment for End Users
Michel BABIN
TechMed 3D, Lévis QC, Canada #64


12:26 High Accuracy Consumer-Grade 3D Scanner and 3D Camera
Bofeng HOU
Revopoint 3D Technologies Inc., Los Angeles CA / Shenzhen, USA / China #21


12:50-14:20 **Lunch Break - Foyer / 1-on-1 Networking**


14:20-16:10 **Technical Session 11: 3D Body Scanning in Medicine 1 – Room C / Track 1 Green**

Session Chair: Sören KOTTNER - Engineer at Zurich Institute of Forensic Medicine, University of Zurich, Switzerland

14:20 Custom Prosthetic Cover Development Methodology
 Branko ŠTEFANOVIČ, Romana UHRÍNOVÁ, Monika MICHALÍKOVÁ, Lucia BEDNARČÍKOVÁ, Jozef ŽIVČÁK
Technical Univ. of Košice, Faculty of Mechanical Eng., Dept. of Biomedical Engineering and Measurement, Košice, Slovakia #17

14:42 Critical Pre and Post Processes for Quick and Accurate Extraction
 of Foot Measurements for Custom Prostheses and Orthoses
Rajesh BHARTIYA, Abhishek MISHRA, Omkar PANDE, Pankaj CHOUDHARI
ProtoTech Solutions and Services Pvt. Ltd., India #20

15:04 Leveraging Digital Technology and AI Application in Eyebrow Design and Cosmetic Treatments
 Soroush VALINIA 1,2
1 Smart beauty Co., Istanbul, Turkey; 2 Tarahteb Co., Tehran, Iran #57

15:26 Few-Shot High-Fidelity 3D Reconstruction of Human Bodies
 Jaime GARCÍA
Crisalix SA, Lausanne, Switzerland #63

14:20-16:10 Technical Session 12: 4D Body Scanning for Apparel – Room B1 / Track 2 Blue

Session Chair: Gerald RUDERMAN - Chief Designer at Zdoit, USA

14:20 Possibilities for Simulating Clothing in Motion on Person-Specific Avatars



Doudou ZHANG, Sybille KRZYWINSKI, Yordan KYOSEV

TU Dresden, Institute of Textile Machinery and High Performance Material Technology, Germany #08

14:42 User-Oriented Product Development with Advanced Scan Solutions



Huangmei LIN, Ellen WENDT, Doudou ZHANG, Jessica BOLL, Jana SIEGMUND, Sybille KRZYWINSKI, Yordan KYOSEV

TU Dresden, Institute of Textile Machinery and High Performance Material Technology, Dresden, Germany #12

15:04 Investigating Fit in Motion with a 4D Photogrammetry Scanner System



Anke KLEPSEK, Angela MAHRERHARDT, Simone MORLOCK

Hohenstein Laboratories GmbH & Co. KG, Bönnigheim, Germany #13

15:26 Analysis of Dimensional Changes in the Lower Limbs During Movement for Sizing and Fit Development



Kasey HATCH 1, Anke KLEPSEK 2, Kristina BRUBACHER 1, Simeon GILL 1, Anura FERNANDO 2

1 The university of Manchester, Manchester, UK; 2 Hohenstein Laboratories, Bönnigheim, Germany #14

15:48 4D Scanning of Clothed Humans - Preliminary Results



Tino KÜHN, Yordan KYOSEV

TU Dresden, Institute of Textile Machinery and High Performance Material Technology,

Chair of Development and Assembly of Textile Products, Germany #25

16:10-16:50 Coffee Break - Foyer / 1-on-1 Networking

16:50-18:00 Technical Session 13: 3D Body Scanning in Medicine 2 – Room C / Track 1 Green

Session Chair: Branko ŠTEFANOVIČ - Researcher & PhD Candidate at Technical University of Košice, Slovakia

16:50 Multispectral 3D Whole-Body Imaging of Dressed and Undressed Bodies in

Combination with Post-Mortem X-Ray Computed Tomography

Sören KOTTNER 1, Martin M. SCHULZ 2, Florian BERGER 1, Michael J. THALI 1, Dominic GASCHO 1

1 Zurich Institute of Forensic Medicine, University of Zurich, Zurich, Switzerland;

2 Institute of Forensic Medicine, Ludwig-Maximilians-University Munich, Munich, Germany #24

17:12 3D Sequential Spacial and Thermal Measurements



Lifong ZOU, Farida FORTUNE, L. NIBALI, N. GKRANIAS, N. MARDAS, N. DONOS

The Institute of Dentistry, Bart's and The London School of Medicine and Dentistry, Queen Mary University of London, UK #47

16:50-18:00 Technical Session 14: Mobile Body Scanning Systems – Room B1 / Track 2 Blue

Session Chair: Marina WEISSE - Clothing Technology Engineer at German Federal Armed Forces, Germany

16:50 Consumer-Facing Smartphone 3D Body & Foot Scanning Based on Medical-Precision Platform



Jeff CHEN

NetVirta Inc., Boston MA, USA #19

17:12 Accurate Capture of Body Shape and Size Using TrueToForm, a 3D Body Scanning Mobile Application



Margaret TAM, Janice TAM

TrueToForm - Tam Technologies, Chicago IL, USA #22



17:34 AI Driven Human Body Digitization



Michael CHEN

MagicWeaver Inc., Santa Clara CA, USA #61

18:00-18:10 Closing Session

18:00 Closing Speech from the Conference Director and Announcements for 3DBODY.TECH 2022

Nicola D'APUZZO

Hometrica Consulting, Switzerland

18:10- Past-conference / 1-on-1 Networking

Icons / Symbols

Presentation/talk from **GOLD / SILVER / BRONZE / VIRTUAL** Exhibitor & Sponsor



Presentation/talk related to **MOBILE APP** solutions



Presentation/talk related to **4D & DYNAMIC** scanning, measurement, simulation, visualization



Presentation/talk related to **AI / ML** Artificial Intelligence & Machine Learning



Presentation/talk related to **AM / 3D PRINT** Additive Manufacturing & 3D Printing



Presentation/talk related to **VR / AR** Virtual & Augmented Reality



Presentation/talk related to **COVID-19** & pandemic



Live demonstration of 3D/4D equipment / solutions

GOLD Exhibitors & Sponsors

3dMD (USA/UK) [3dmd.com](https://www.3dmd.com)

3dMD, a proven leader in 3D high-precision anatomical scanning, will be demonstrating workflow efficiencies with its latest temporal-3D (4D) capture systems. 3dMD sequences of high-quality motion images of the full body, head, foot, and/or hand are supported by anthropometric measurement, projection and tracking apps to accelerate the development and training of innovative wearable technologies and devices that precisely adapt to their users' performance needs.



ViALUX (Germany) www.vialux.de

Based upon DLP technology ViALUX offers full-field 3D scanner systems which allow medical grade 3D scanning with high reliability and accuracy concurrent with ease of use. Unique hardware design and long-term proven sophisticated software algorithms yield outstanding 3D frame rates for capturing full body or body parts. ViALUX zSnapper® devices are successfully used in health care facilities and clinics.



Size Stream (USA) www.sizestream.com

Size Stream is a leader in 3D body scanning technology located in the renowned Research Triangle Park in North Carolina. Founded in 2012, Size Stream is a wholly owned subsidiary of TAL Group. Apart from innovation in the 3D industry, the company focuses on providing services to several markets including apparel, weight-loss, and uniforms, covering a worldwide network of customers. EveryBODY connected.



SILVER Exhibitors & Sponsors

botspot (Germany) [botspot.de](https://www.botspot.de)

Shifting the status quo with innovative 3D scanning solutions worldwide. Since 2013, botspot develops and builds 3D scanners "Made in Germany". The scanning technology utilizes photogrammetry that enables contactless, rapid and completely safe scanning. Objects of every size and every shape are scanned in just 0,01 seconds, the digital 3D replica appears as ultra precise data with highly colorfast texturing.



Renderpeople (Germany) [renderpeople.com](https://www.renderpeople.com)

Renderpeople offers the world's largest dataset of more than 4500 scanned human 3D models. With almost 10 years of experience in generating hyperrealistic photoscan data, Renderpeople is a leader in the industry. Their diverse but technically homogeneous datasets enable companies and institutes worldwide to create ground truth synthetic data to train machine learning models for computer vision research.



Avalution (Germany) www.avalution.net

Avalution scans, measures, analyses and digitalizes real people. The company has the world's largest body dimension database which contains the body scans of around 100,000 persons. Avalution also carries out serial measurement surveys and is a leader in the field of body scanning. Avalution makes size & fit and ergonomics measurable for product development in various industries.



ESENCA (Portugal) (Germany) esenca.app

ESENCA is a B2B solution for fashion e-commerce that solves the problem of returns. ESENCA's product is a web widget that takes two pictures to predict the exact size that a customer should order and extract more than 100 key body measurements.



VIRTUAL Exhibitors & Sponsors

IEEE-SA (USA) standards.ieee.org/industry-connections/3d/bodyprocessing.html

The IEEE-SA is a leading consensus building organization that nurtures, develops and advances global technologies. IEEE standards drive the functionality, capabilities and interoperability of a wide range of products and services that transform the way people live, work and communicate, including IEEE's Industry Connections program on 3D Body Processing.



The Instituto de Biomecánica IBV (Spain) anthropometry.ibv.org

The Instituto de Biomecánica IBV supports innovative business models and research based on user anthropometry, by using advanced 3D data treatment tools (accurate and automated creation of 3D body avatars from 3D raw scans, 2D pictures or 1D measurements; 3D databases harmonisation tools, virtual measuring tape or shape analysis tools), smartphone 3D scanning technologies, and breakthrough 4D scanning technology.



VIRTUAL Exhibitors & Sponsors (cont.)

Thor 3D (Germany/Russia) thor3dscanner.com

Thor 3D is a manufacturer of hand-held 3D scanners. The company has two scanners in its portfolio: Calibry 3D scanner meant for medium objects (from 20cm to 10m in length); Calibry Mini 3D scanner meant for small objects (from 2 cm to 30 cm in length). Both scanners are lightweight, affordable and easy to use. The company also offers a range of bundles for specialists in reverse engineering, design and quality control.

THOR^{3D}

Meshcapade (Germany) meshcapade.com

Meshcapade is a startup creating realistic human avatars for use in research, apparel, biomechanics, virtual reality and film. The nuances of human shape and movement are modeled by using machine learning and computer vision. Meshcapade builds automation from 3D & 4D scans, RGB-D sequences, Mocap, IMU and image data. Meshcapade brings realistic human models to life in everyday environments.

Meshcapade

TrueToForm (USA) truetoform.fit

TrueToForm is a smartphone-based body scanning platform that enables fashion designers, costume designers, and brands to generate custom 3D body avatars of their fit models and customers for the design, fitting, and presentation of garments. TrueToForm's 3D technology reduces the need for in-person fittings from the initial design process to merchandising, significantly cutting costs across the supply chain.

TF

BASIC Sponsors

Hometrica Consulting (Switzerland) www.hometrica.ch

Hometrica Consulting - Dr. Nicola D'Apuzzo is organizing the series of 3DBODY.TECH Conference & Expo. Hometrica Consulting is a leading international consulting firm in the sectors of 3D human body scanning and processing technologies.

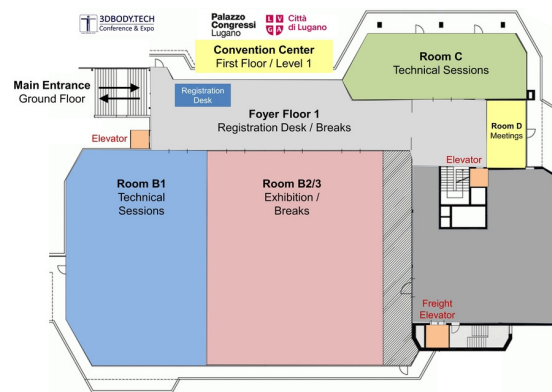
hometrica consulting

3DBODY.TECH Conference & Expo Venue: Lugano Convention Center - Palazzo dei Congressi Lugano

The conference and exhibition take place at the 1st floor of the Convention Center.

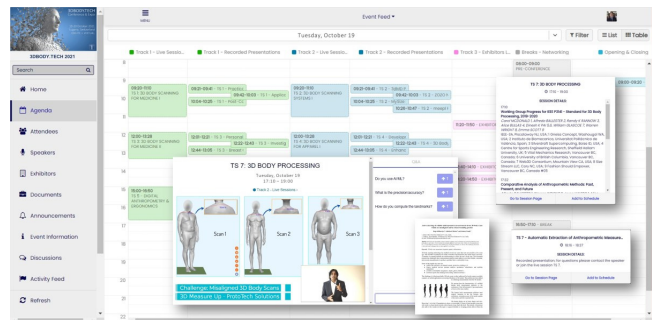
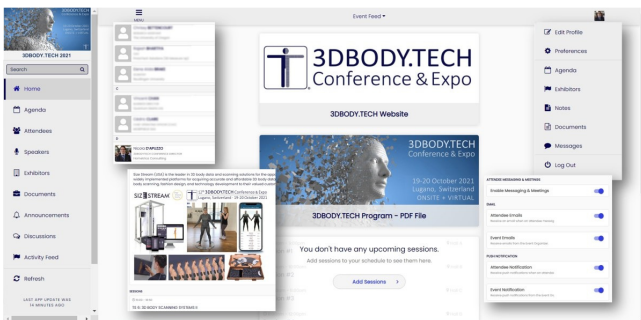
Address: Palazzo dei Congressi, Piazza Indipendenza 4, 6900 Lugano, Switzerland www.luganoconventions.com

A valid **COVID-19 certificate** (vaccination, test or recovery) is required to access the Lugano convention center and attend 3DBODY.TECH 2021 onsite. Further details are available at 3dbody.tech/venue.html# covid19.



3DBODY.TECH Conference & Expo Online Platform

The 3DBODY.TECH 2021 online conference platform will be accessible to all onsite and online attendees, speakers, exhibitors.



Conference Office

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