



10<sup>th</sup> **3DBODY.TECH** Conference & Expo  
Lugano, Switzerland · 22-23 October 2019

Program of  
**3DBODY.TECH 2019**  
**10th International Conference and Exhibition on  
3D Body Scanning and Processing Technologies**  
Lugano, Switzerland, 22-23 Oct. 2019  
[www.3dbody.tech](http://www.3dbody.tech)

**Organizer**

Hometrica Consulting - Dr. Nicola D'Apuzzo  
Ascona, Switzerland



## 3DBODY.TECH 2019 - PROGRAM



# 10<sup>th</sup> 3DBODY.TECH Conference & Expo

Lugano, Switzerland · 22-23 October 2019

### Program Outline

3DBODY.TECH 2019 10th International Conference and Exhibition on 3D Body Scanning and Processing Technologies Lugano, Switzerland, 22-23 October 2019, <a href="http://www.3dbody.tech">www.3dbody.tech</a>						
Time	Tuesday 22 October 2019		Wednesday 23 October 2019			
08:00	Registration		Registration		Exhibition Setup	
09:00			Technical Session 7 3D Hand & Foot Scanning		Technical Session 8 3D Body Technology for Apparel II	Exhibition
10:00	Opening Session		Coffee Break			
11:00	Coffee Break		Technical Session 9 3D Body Technology for Social Sciences		Technical Session 10 3D Body Scanning Systems	
12:00	Technical Session 1 3D Body Scanning in Medicine	Technical Session 2 3D & 4D Body Scanning	Lunch Break			
13:00	Lunch Break					
14:00	Lunch Break		Technical Session 11 3D Body Technology for Health & Sport		Technical Session 12 3D Body Technology for Apparel III	
15:00	Technical Session 3 3D Body Scanning Assessment & Use	Technical Session 4 3D Body Technology for Apparel I	Coffee Break		Exhibition Breakdown	
16:00	Coffee Break					
17:00	Technical Session 5 Digital Anthropometry & Ergonomics	Technical Session 6 3D Body Scanning & Measurement	Technical Session 13 3D Body Technology for Apparel IV			
18:00			Closing Session			
19:00	Welcome Cocktail					

### Icons / Symbols



Presentation/talk from **GOLD** Exhibitor & Sponsor



Presentation/talk from **SILVER** Exhibitor & Sponsor



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



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



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



**Live demonstration** of 3D/4D equipment / solutions

# 3DBODY.TECH 2019 - CONFERENCE PROGRAM

**Tuesday 22<sup>nd</sup> October 2019**

**08:00-09:30 Registration – Welcome Desk**

**09:30-10:40 Opening Session – Room B1**

Session Chair: Dr Nicola D'APUZZO  
*Hometrica Consulting, Switzerland*

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

09:50 World Premieres, Product Launches and Announcements from Exhibitors at 3DBODY.TECH 2019



Size Stream @ Home  
Dr David BRUNER, CTO, Size Stream, USA



Cost Effective, High Accuracy Depth Camera - Acusense - 3D Face Scanner - Desktop 3D Scanner  
Dr Tao YANG, R&D Director, Chishine, China



Announcements from 3dMD  
Chris LANE, CEO, 3dMD, UK/USA



Digital Air's Camera Control System for 3D and 4D Photogrammetry  
Dayton TAYLOR, Founder/CEO, Digital Air, USA



Announcements from IBV  
David GARRIDO, Innovation Director, IBV, Spain



This is the botscan NEO - Highly Precise and Colorfast 3D Data in Just 0.01 Second  
Lisa FRANK, Shareholder, botspot, Germany



QuantaCorp - Two Pictures 3D Body Scan Platform Introducing SizePass  
Alexander VANDELDE, CEO, QuantaCorp, Belgium



IEEE Industry Connections Group for 3D Body Processing  
Rudi SCHUBERT, Director New Initiatives, IEEE-SA, USA



Space Vision 3D Body Scanning Solutions  
Hideto KAMESHIMA, R&D Manager, Space Vision, Japan



ImFusion One-Shot Reconstruction System  
Dr Alexander LADIKOS, CTO, ImFusion, Germany



New 3D Body Scanner AVAone and Results of Size NorthAmerica  
Michael STÖHR, CEO, Avalution, Germany



meepl - An Instant Body Reconstruction Platform for Apparel  
Ferdinand METZLER, CEO & Founder, meepl, Switzerland

**10:40-11:20 Coffee Break – Foyer**

**11:20-13:10 Technical Session 1: 3D Body Scanning in Medicine I – Room C**

Session Chair: Dr Fatima MERCHANT  
*The University of Houston, USA*

11:20 Automatic Low-Cost Tool for Head 3D Modelling and Cranial Deformation Analysis in Infants



Inés BARBERO-GARCÍA 1, José Luis LERMA 1, Pablo MIRANDA 2  
1 Photogrammetry and Laser Scanning Research Group, Universitat Politècnica de València, Valencia, Spain;  
2 Hospital Universitari i Politècnic La Fe, Valencia, Spain

11:42 Shapeshift 3D Repair™ - A Fully Automated and Unsupervised Cloud API for the Reliable Reconstruction of Raw 3D Surface Scans Data  
Patrick LAURIN, Daniel BÉLAND, Jonathan BORDUAS  
Technologies ShapeShift 3D Inc., Montreal QC, Canada

12:04 ManoX: Making 3D Hand Scanning Easy and Scalable






Pieter SMAKMAN  
Manometric B.V., Delft, The Netherlands


12:26 Additive Manufacturing in Medical Applications needs Special Approaches - Practical Examples  
Antonius KÖSTER  
Antonius Köster GmbH & Co KG, Meschede, Germany


12:48 Interactive Visualization of Breast Shape for Breast Surgery  
Urmila SAMPATHKUMAR 1, Audrey CHEONG 1, Gregory P. REECE 2, Mary Catherine BORDES 2, Summer E. HANSON 2, Mia K. MARKEY 3,2, Fatima A. MERCHANT 1,3  
1 University of Houston, TX, USA; 2 The University of Texas MD Anderson Cancer Center, TX, USA;  
3 The University of Texas at Austin, TX, USA



**11:20-13:20 Technical Session 2: 3D & 4D Body Scanning – Room B1**Session Chair: Prof Dr Yordan KYOSEV  
TU Dresden, Germany



**11:20** **MOVE 4D: Accurate High-Speed 3D Body Models in Motion**  
  Eduardo PARRILLA, Alfredo BALLESTER, Francisco PARRA,  
Ana V. RUESCAS, Jordi URIEL, David GARRIDO, Sandra ALEMANY  
Instituto de Biomecánica de Valencia, Universidad Politécnica de Valencia, Valencia, Spain

**11:40** **Man vs. Machine - Measuring People for the Apparel Industry**  
 Warren WRIGHT  
Size Stream LLC, Cary, NC, USA

**12:00** **Full Body Scanner and Virtual Scanner - The Right 3D Solution for Apparel Companies and their Customers**  
 Tim GÜNZEL  
Avalution GmbH, Kaiserslautern, Germany

**12:20** **Novel 3D Body Scanner and Humanmetrics Service**  
 Hideto KAMESHIMA  
Spacevision Inc., Tokyo, Japan

**12:40** **The Capabilities of 4D Body Scanning: in Whole and in Part**  
  Chris LANE  
3dMD Ltd., London / Atlanta GA, UK / USA

**13:00** **Web3D Consortium's ISO standards (X3D and HAnim) - Overview, Insight, Applications**  
  Anita HAVELE 1, Chris LANE 2  
1 Web3D Consortium, Mountain View CA, USA; 2 3dMD Ltd., London / Atlanta GA, UK / USA

**13:10-14:40 Lunch Break – Foyer****14:40-16:30 Technical Session 3: : 3D Body Scanning Assessment & Use – Room C**Session Chair: Ales JURCA  
Volumental AB, Sweden


**14:40** **From 3D Body Scan to Finished Product Without Pushing the Button**  
Yannick FRANCKEN, Stijn LIGOT  
3D Body Cloud, Brasschaat, Belgium

**15:02** **HOLOFIL - 3D Visualization Front End for Body Scanners**  
Mrunal GAWADE  
HOLOFIL, Amsterdam, The Netherlands

**15:24** **3D Face Analysis vs Applications: Studies and Perspectives**  
Enrico VEZZETTI, Federica MARCOLIN, Sandro MOOS, Mariagrazia VIOLANTE, Luca ULRICH  
DIGEP - Politecnico di Torino, Turin, Italy



**15:46** **Reliability of Measuring Morphology of the Paediatric Foot Using the Artec Eva Hand Held Scanner**  
Matyas VARGA 1, Stewart C. MORRISON 1, Carina PRICE 2  
1 School of Health Sciences, University of Brighton, Eastbourne, UK; 2 School of Health and Society, University of Salford, UK


**14:40-16:30 Technical Session 4: 3D Body Technology for Apparel I – Room B1**Session Chair: Prof Sybille KRZYWINSKI  
TU Dresden, Germany

**14:40** **The Missing Link Between 3D Body Scan and Apparel Production**  
 Marc C. CLOSE  
Bespokify Pte Ltd., Singapore

**15:02** **That's the Way from 3D Body Scan to Individual Customized Clothing**  
Stefan GERTSCH  
Gertsch Consulting & Mode Visions, Zofingen, Switzerland

**15:24** **The Suitability of Body Scanning Measurement in Pattern Drafting Methods**  
Maryam AHMED, Tarfah ALRUSHAYDAN, Simeon GILL, Steven G. HAYES, Kristina BRUBACHER  
The University of Manchester, Manchester, UK #41

**15:46** **Evaluating Soft and Hard Avatars for Virtual Fit Testing**  
  Yuan TIAN 1,2, Ye FAN 1,2, Dinesh K. PAI 1,2  
1 Vital Mechanics Research, Canada; 2 University of British Columbia, Vancouver BC, Canada

**16:08** **Development of a Kinematic Human Model for Clothing and High Performance Garments**  
 Doudou ZHANG, Sybille KRZYWINSKI  
TU Dresden, Institute of Textile Machinery and High Performance Material Technology, Germany

**16:30-17:00 Coffee Break – Foyer**

**17:00-18:50 Technical Session 5: Digital Anthropometry & Ergonomics – Room C**Session Chair: Dr Junfeng PENG  
*Decathlon SportsLab, France*

**17:00** Localizing Anthropometric Landmarks Using 3-D Surface Features  
Chang SHU 1, Pengcheng XI 1, Allan KEEFE 2  
1 National Research Council of Canada, Ottawa, Canada; 2 Defence Research and Development Canada, Toronto, Canada



**17:22** ARSynth : Robust Real-Time Human Torso Tracking from Synthetically Trained Deep Neural Networks  
Prashanth CHANDRAN 1, Endri DIBRA 2, Ben HUBER 3  
1 Computer Graphics Lab, ETH Zurich, Zurich, Switzerland; 2 Arbrea Labs AG, Zurich, Switzerland



**17:44** Digital People - Avatars in Virtual Product Development  
Michael STÖHR  
Avalution GmbH, Kaiserslautern, Germany



**18:06** Designing Physical Human-Machine-Interfaces for Exoskeletons Using 3D-Shape Analysis  
Christine LINNENBERG 1, Robert WEIDNER 1,2  
1 Leopold-Franzens-Universität Innsbruck, Innsbruck, Austria;  
2 Helmut Schmidt University / University of the Federal Armed Forces Hamburg, Hamburg, Germany

**18:28** Selection of Protective Helmets Based on the Scanning System  
Konstantin KARAVAEV, Maxim TRUPHANOV  
Elasizer srl, Milan, Italy

**17:00-18:50 Technical Session 6: 3D Body Scanning & Measurement – Room B1**Session Chair: Dr Agnes PSIKUTA  
*Empa, Switzerland*

**17:00** meepl - An Instant 3D Body Reconstruction Platform for Apparel  
Ferdinand METZLER  
meepl, Zurich, Switzerland



**17:22** Fully Anonymised Human Measure Acquisition Process by Mobile for Identity Protection  
Alessandro CANEPA  
i-Deal S.r.l., Biella, Italy



**17:44** Smartphone-Based Precision 3D Body Scanning Applications in Apparel and Footwear Markets  
Jeff CHEN, Andy EOW, Chelsea LOMBARDI, Cameron ARMSTRONG  
NetVirta Inc., Boston MA, USA



**18:06** Connecting the Dots: Platform Approach to 3D Body Scanning and Multi-Service Usage of the Digital-Self  
Dobrin MIREVSKI, Krasimir TONCHEV  
Imagifinity Ltd., Sofia, Bulgaria

**18:28** Real Avatar Production - Raspberry Pi Zero W Based Low-Cost Full Body 3D Scan System Kit for VRM Format  
Yukihiro IWAYAMA  
EIDEN Inc., Tokyo, Japan

**18:50-21:00 Welcome Cocktail****Wednesday 23<sup>rd</sup> October 2019****08:00-08:30 Registration – Welcome Desk****08:30-10:20 Technical Session 7: 3D Hand & Foot Scanning – Room C**Session Chair: Dr Chang SHU  
*National Research Council of Canada*

**08:30** Comparison of Glove Specifications, 3D Hand Scans, and Sizing of Sports Gloves for Athletes  
Linsey A. GRIFFIN 1, Susan SOKOLOWSKI 2, Elisheva SAVVATEEV 1, Arif-UI-Anwar BHUYAN 1, Nathan ROESE 2  
1 University of Minnesota, St. Paul, MN, USA; 2 University of Oregon, Portland OR, USA

**08:52** Development of a 3D Grading Method for Shoe Lasts Based on Scanned 3D Foot Data  
Jana SIEGMUND, Huangmei LIN, Sybille KRZYWINSKI, Monika RICHTER, Kathrin SCHÄFER  
1 TU Dresden, Institute of Textile Machinery and High Performance Material Technology, Germany;  
2 Prüf- und Forschungsinstitut Pirmasens e. V., Pirmasens, Germany

**09:14** MySize.Shoes: Using Small Data and Machine Learning Based Individual Fit Profile to Enable Industrial Made to Measure Approach in Footwear  
Andrey GOLUB  
ELSE Corp Srl, Milan, Italy




**09:36** "My Bauer" - Showcasing the Use of 3D Foot Scans in the Mass Manufacture of Custom Skates  
Ales JURCA 1, Raymond BOISSONNEAULT 2  
1 Volumental, Stockholm, Sweden; 2 Bauer Hockey, Blainville QC, Canada



**09:58** Capture Every Foot's Unique Form  
Antonin G. BÉRUBÉ  
Bodyform3D, Montréal QC, Canada



**08:30-10:20 Technical Session 8: 3D Body Technology for Apparel II – Room B1**Session Chair: Dr Simeon GILL  
The University of Manchester, UK

- 08:30 Development of a Jeans Sizing System for Young Black Pear-Shaped South African Women Using a 3D Body Scanner  
Phumza SOKHETYE  
Durban University of Technology, South Africa
- 
- 08:52  Sizolution: Reconstructing Customers' Body Parameters Online. Methods and Comparison of Accuracy  
Vahe TAAMAZYAN  
Sizolution GmbH, Berlin, Germany
- 
- 09:14 CLO3D Fashion Design Software - A Perspective for Virtual Thermal Modelling of Garments  
Agnes PSIKUTA, Marie-Helene JÄGER, Annette MARK, Harry MCGOWAN, Ankit JOSHI, Marin KINK  
Empa, Swiss Federal Laboratories for Materials Science and Technology, St. Gallen, Switzerland
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- 09:36 Analysis of Thermal Comfort of Clothing with Different Textile Material through Thermal Simulation  
Muhammad AWAIS, Ellen WENDT, Sybille KRZYWINSKI  
TU Dresden, Institute of Textile Machinery and High-Performance Material Technology, Germany
- 
- 09:58 Evaluation of the Accuracy and Suitability of Low-Cost RGB-D Sensor for Automated Air Gap Measuring in the Apparel Industry  
Yordan K. KYOSEV, Jana SIEGMUND  
Chair of Assembly Technology for Textile Products, ITM, TU Dresden, Dresden, Germany

**10:20-10:50 Coffee Break – Foyer****10:50-12:40 Technical Session 9: 3D Body Scanning for Social Sciences – Room C**Session Chair: Prof Inga DĀBOLIŅA  
Riga Technical University, Latvia

- 10:50 The Use of 3D Bodies in a Computerised and Immersive Virtual Reality Body Image Intervention  
Nadia MAALIN 1, Kamila R. IRVINE 1, Andrew IRVINE 1, Piers L. CORNELISSEN 2, Kay L. RITCHIE 1, Martin J. TOVÉE 1  
1 School of Psychology, University of Lincoln, UK; 2 School of Psychology, Northumbria University, Newcastle Upon Tyne, UK
- 
- 11:12 The Development of a 3D Body Scan and Composition Database to Assess Body Size Perception in Psychological Research  
Nadia MAALIN 1, Sophie M. MOHAMED 1, Robin S. KRAMER 1, Andrew IRVINE 1, Piers L. CORNELISSEN 2, Kay L. RITCHIE 1, Martin J. TOVÉE 1  
1 School of Psychology, University of Lincoln, UK; 2 School of Psychology, Northumbria University, Newcastle Upon Tyne, UK
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- 11:34  Real-time 360° Body Scanning System for Virtual Reality Research Applications  
Louis ALBERT 2, Florian LANCE 1, Margaux DUBESSY 2, Bruno HERBELIN 1, Gilles REYMOND 2, Olaf BLANKE 1  
1 Laboratory of Cognitive Neuroscience, Ecole Polytechnique Fédérale de Lausanne, Geneva, Switzerland;  
2 VR Facility, Foundation Campus Biotech Geneva, Geneva, Switzerland
- 
- 12:56  From Body Movements to Music - A New Device for Movement Therapies  
Christian BRÄUER-BURCHARDT 1, Matthias HEINZE 1, Roland RAMM 1, Robert WECHSLER2, Ursula MÜLLER3, Peter KÜHMSTEDT 1, Gunther NOTNI 1,4  
1 Fraunhofer IOF Jena, Jena, Germany; 2 Palindrome Dance Company e.V., Weimar, Germany;  
3 Grenzenlos e.V., Jena, Germany; 4 Technical University Ilmenau, Ilmenau, Germany


**10:50-12:50 Technical Session 10: 3D Body Scanning Systems – Room B1**Session Chair: Dr Junfeng PENG  
Decathlon SportsLab, France

- 10:50   One Scan for All. Using Machine Learning Approaches to Apply an Accurate 4D Sequence Data Across Multiple Industries  
Chris LANE  
3dMD Ltd., London / Atlanta GA, UK / USA
- 
- 11:12   QuantaCorp - 3D Body Scanning in the Real World, Anywhere, Anytime  
Wim DEVOS  
QuantaCorp, Ghent, Belgium
- 
- 11:34  Multi-Sensor RGB-D Scanning with the ImFusion Vision SDK  
Alexander LADIKOS  
ImFusion GmbH, Munich, Germany
- 
- 11:56  3D in the Dark - Full Body Scanning in Infrared  
Niklas BRUSTEN  
botspot GmbH, Berlin, Germany
- 
- 12:28   3D and 4D Body Scanning: A Cinematic Perspective  
Dayton TAYLOR  
Digital Air, New York NY, USA

**12:40-14:10 Lunch Break – Foyer**



## 14:10 Size Stream Body Fat Formulas


 Breck SIEGLINGER, David BRUNER  
Size Stream LLC, Cary, NC, USA

## 14:30 Development of a 3D Body Database to Improve Measures of Perceptual Male Body Image Distortion

 Sophie MOHAMED 1,2, Nadia MAALIN 1, Robin KRAMER 1, Andrew IRVINE 1, Piers L. CORNELISSEN 3, Martin J. TOVÉE 1  
 1 School of Psychology, U. of Lincoln, UK; 2 Lincoln Institute for Health, U. of Lincoln, UK; 3 School of Psychology, Northumbria U., UK


## 14:50 3D Body Scanning in Fitness Clubs

 Nikolay KOZLOV, Dzmitry KOMAR  
 Scaneca GmbH, Berlin, Germany

## 15:10 Fit3D: 3D Body Scans for Wellness: 55 Countries, 2,000 Scanners, and 1.3 Million Scans and Growing

 Greg MOORE  
 Fit3D Inc., San Mateo CA, USA


## 15:30 A Motion Capture System for Sport Performance Analysis Based on Inexpensive RGB-D Sensors


 Cyrille ANDRÉ, Cedric LEMAÎTRE, Matthieu VOIRY, Antoine LAVAUULT  
 Apeira Technologies, Le Creusot, France

## 15:50 Styku 3D Body Scanning Solutions

 Raj SAREEN  
 Styku LLC, Los Angeles CA, USA
14:10-16:00 **Technical Session 12: 3D Body Technology for Apparel III – Room B1**Session Chair: Prof Dinesh K. PAI  
University of British Columbia, Canada

## 14:10 Working Group Progress for IEEE P3141 - Standard for 3D Body Processing, 2018-2019


 Carol MCDONALD 1, Alfredo BALLESTER 2, Randy K. RANNO 3, Maxim FEDYUKOV 4, Inga DABOLINA 5  
 1 Gneiss Concept, Washougal, WA, USA; 2 Instituto de Biomecánica, Universitat Politècnica de València, València, Spain;  
 3 Silverdraft Supercomputing, Boise, ID, USA; 4 Texel, Moscow, Russia; 5 Institute of Design Technologies, RTU, Riga, Latvia

## 14:32 Garment Fit: Where Do We Stand?

 Eva LAPKOVSKA, Inga DABOLINA, Liene SILINA  
 Riga Technical University, Faculty of Material Science and Applied Chemistry, Institute of Design Technologies, Riga, Latvia

## 14:54 3D Body Scanning in the Apparel Industry: Do We Really Know Where We Are Heading?

 Monika JANUSZKIEWICZ 1, Christopher J. PARKER 2, Steven G. HAYES 1, Simeon GILL 1  
 1 The University of Manchester, Manchester, UK;  
 2 Loughborough University, Loughborough, UK

## 15:16 Novel Methods to Drive Pattern Engineering through and for Enhanced Use of 3D Technologies

 Emma SCOTT 1, Simeon GILL 2, Carol MCDONALD 3  
 1 Fashion Should Empower, Vancouver Island BC, Canada; 2 The University of Manchester, UK;  
 3 Gneiss Concept, Washougal, WA, USA

## 15:38 How the U.S. Sport Performance Apparel Industry Sizes Up to Female Plus Bodies

 Susan L. SOKOLOWSKI 1, Jessie SILBERT 1, Linsey GRIFFIN 2  
 1 University of Oregon, Portland OR, USA; 2 University of Minnesota, St. Paul, MN, USA
16:00-16:30 **Coffee Break – Foyer**16:30-18:00 **Technical Session 13: 3D Body Technology for Apparel IV – Room B1**Session Chair: Prof Inga DĀBOLINA  
Riga Technical University, Latvia


## 16:30 Functional Body Measurements - Motion-Oriented 3D Analysis of Body Measurements


 Simone MORLOCK, Christine LOERCHER, Andreas SCHENK, Anke KLEPSE  
 Hohenstein Institut fuer Textilinnovation gGmbH, Boennigheim, Germany

## 16:52 Method to Capture and Analyze the Waist-Hip-Thigh Body Region of Seated-Standing 3D Scans


 Linsey GRIFFIN, Bethany JUHNKE, Emily SEIFERT, Colleen POKORNY, Karolina DORAN  
 University of Minnesota, St. Paul, MN, USA

## 17:14 The Detection of the Upper Boundary of Breasts Using 4D Scanning Technology


 Jie PEI 1, Linsey GRIFFIN 2, Jintu FAN 1,3, Susan P. ASHDOWN 1  
 1 Department of Fiber Science and Apparel Design, Cornell University, Ithaca, NY, USA;  
 2 Department of Design, Housing, and Apparel, University of Minnesota, St. Paul, MN, USA;  
 3 The Hong Kong Polytechnic University, Kowloon, Hong Kong

## 17:36 Trends in Breast Measurements of Unilateral Breast Reconstruction Patients to Inform Bra Design

 Krista M. NICKLAUS 1,2, Eloise JEWETT 1, Chi LIU 3, Jun LIU 2, Gregory P. REECE 2,  
 Summer E. HANSON 2, Fatima A. MERCHANT 1,4, Mia K. MARKEY 1,2  
 1 The University of Texas at Austin, USA; 2 The University of Texas MD Anderson Cancer Center, Houston, TX, USA;  
 3 Xi'an Polytechnic University, China; 4 University of Houston, TX, USA
18:00-18:10 **Closing Session – Room B1**
 18:00 Closing Speech from the Conference Director  
 and Announcements for 3DBODY.TECH 2020  
 Nicola D'APUZZO, Hometrica Consulting, Switzerland

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## GOLD Exhibitors & Sponsors

### 3dMD (USA/UK) [www.3dmd.com](http://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 help promote and advance the creation of new wearable technologies that precisely adapt to a person's shape and enhance performance.



### SPACE VISION (Japan) [www.spacevision.tokyo](http://www.spacevision.tokyo)

SPACE VISION manufactures innovative 3D full body and face scanning systems. Two different 3D full body scanners are offered: a portable type and a small footprint type. SPACE VISION offers also various 3D imaging solutions by using the 3D body data cloud service called Humanmetrics (HMS), which includes SPACE VISION's original 3D body scan data processing and measurement engines.



### Size Stream (USA) [www.sizestream.com](http://www.sizestream.com)

Size Stream is the leader in 3D body data and scanning solutions for the apparel, health, and fitness industries. With hundreds of customers throughout the globe, Size Stream is one of the most widely implemented platforms for acquiring accurate and affordable 3D body data. Size Stream brings over 100 years of combined experience in 3D body scanning, fashion design, and technology development to their valued customers.



### The Institute of Biomechanics IBV (Spain) [anthropometry.ibv.org](http://anthropometry.ibv.org)

IBV presents a high-speed 4D body scanner, MOVE 4D, the new generation of automatic & markerless 3D human body motion scanner. IBV is a leading company 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) and smartphone 3D scanning technologies to support innovative business models based on user anthropometry.



### Avalution (Germany) [www.avalution.net](http://www.avalution.net)

Avalution puts the human being at the heart of product development. 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. More than 20 employees at the company with headquarters in Germany make size & fit and ergonomics measurable for product development in various industries.



### QuantaCorp (Belgium) [www.quantacorp.io](http://www.quantacorp.io)

QuantaCorp offers 3D body measurement systems for mobile devices. Just two pictures are required to measure and sizing the entire body with QuantaCorp's technology. Results are delivered automatically within 10 seconds, from start to finish. The 3D avatar and measurements are instantly available. Applications are focused in retail, health/fitness and medical markets.



## SILVER Exhibitors & Sponsors

### IEEE-SA (USA) [standards.ieee.org](http://standards.ieee.org)

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.



### Web3D Consortium (USA) [www.web3d.org](http://www.web3d.org)

Web3D Consortium, founded in 1997, is an International, non-profit, member-funded, industry standards development organization. Web3D Consortium develops and maintains royalty-free ISO standards for web-based 3D graphics. Of particular interest for 3D body data are the X3D (Extensible 3D) Graphics Standard and the H-Anim (Humanoid Animation) International Standard.



### ImFusion (Germany) [www.imfusion.com](http://www.imfusion.com)

ImFusion offers software solutions and R&D services for 3D scanning, computer vision and medical image analysis. ImFusion's software platform allows rapid development of custom scanning and geometry processing solutions using GPU-accelerated algorithms and advanced interactive visualization. Popular RGB-D sensors are directly supported. For common use cases, ImFusion's RecFusion software offers ready-to-use real-time scanning solutions supporting one or multiple RGB-D sensors.



### TechMed 3D (Canada) [techmed3d.com](http://techmed3d.com)

TechMed 3D's mission is to make CAD-CAM technologies for human body accessible by developing and offering the most user-friendly and fast scanning system. TechMed 3D (Canada) helps practitioners in the orthotics, prosthetics and custom made equipment industry to seamlessly integrate technology to their business, to make their life easier, increase their productivity, their turnaround time and their profitability.





## SILVER Exhibitors & Sponsors (cont.)

### Digital Air (USA) [digitalair.com](http://digitalair.com)

Digital Air (USA) produces synchronous camera array systems for instantaneous 3D and 4D body capture and has produced custom 2D camera array systems for Adidas, Apple, Nike and others. Digital Air's founder, Dayton Taylor, pioneered the virtual camera movement visual effects used in The Matrix (1999) and Tony Scott's Deja Vu (2006), and with MPC produced the first 4D holographic humans for Paramount Pictures Ghost in the Shell (2017).



### botspot (Germany) [www.botspot.de](http://www.botspot.de)

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. Individual complete scanning solutions within every scope of application are also realized in the special botspot R&D department.



### Elasizer (Italy) [www.elasizer.com](http://www.elasizer.com)

Elasizer offers unique ground-breaking solution for human body scan, aiming to make the process of individual wear fitting fast, easy, and precise. The easy 3D body scanning technology based on a special elastic measuring garment is a compromise between expensive measuring rigs and low cost methods, which narrows the gap between manufacturer and customer in modern mass market and line production.



### Manometric (The Netherlands) [manometric.nl](http://manometric.nl)

Manometric creates the digital standard for brace production, highly improves the quality and comfort of orthotics and reduces drastically manual labor with unique 3D print & scan technology. For medical analysis and the production of orthotics and prosthetics, a 3D scan is the starting point. With ManoX - an instant, reliable way of body scanning - the entire hand is 3D scanned faster than the blink of an eye.



### Vital Mechanics Research (Canada) [www.vitalmechanics.com](http://www.vitalmechanics.com)

Vital Mechanics Research develops the world's most advanced computational models of the human body. Its patent-pending technology simulates how the human body moves and interacts with physical objects, leveraging two decades of research in soft tissue biomechanics at the University of British Columbia. Its software solutions enable digital transformation of the apparel pipeline, particularly for close-to-body garments.



### Bespokify (Singapore) [bespokify.com](http://bespokify.com)

Bespokify is a leading fashion-tech company that generates custom-fitted apparel patterns in seconds, no matter the body type or product design. Bespokify's API fully automates custom pattern creation from 3D body scans or hand measurements, which can be cut straight to fabric within seconds of an order being placed. Bespokify integrates with all major 3D scanning vendors for the apparel industry.



### Xi'an Chishine Optoelectronics Technology (China) [en.chishine3d.com](http://en.chishine3d.com)

Xi'an Chishine Optoelectronics Technology is a high-tech company originated in Xi'an and backed by Xi'an Jiaotong University and Xi'an Institute of Optics and Precision Mechanics. Chishine focuses on 3D digitization systems, holding the notion of "accurate and easy scan". Chishine fast 3D face scanners are used in the fields of medicine, cosmetics, biometry and others.



### Revopoint 3D Technologies (USA/China) [www.revopoint3d.com](http://www.revopoint3d.com)

Revopoint 3D Technologies, part of Xi'an Chishine Optoelectronics Technology, is an emerging high-tech company specialized in providing 3D digitalization and intelligent image recognition solutions. Revopoint's team is committed to developing and manufacturing more intelligent and highly accurate 3D cameras that are easy to use for everyone.



### meepl (Switzerland) [www.meepl.com](http://www.meepl.com)

meepl deals with the acquisition and processing of body-related data and provides software solutions for the apparel industry. Leveraging artificial intelligence and visual computing, meepl enables brands and retailers to reduce return rates, digitize supply chains and deliver an interactive and personalized 3D shopping experience to end users. meepl's product portfolio offers smartphone-based 3D body scanning, size recommendation, 3D virtual showroom and 3D virtual dressing room.



### SizeYou by i-Deal (Italy) [www.SizeYou.it](http://www.SizeYou.it)

SizeYou, by i-Deal, collects the measures of the whole body by two pictures from a smartphone. The peculiarities of the process are the completely anonymized identity of the subject and the absolute privacy protection (developed specifically for healthcare, security and defense domains). SizeYou app collects human measures by A.I., reproducing the behavior of a professional tailor and providing the contour of the body, the posture, a graphical visualization and the evolution in time.



### Sizolution (Germany) [sizolution.com](http://sizolution.com)

Sizolution helps fashion stores boost sales and reduce returns by bringing real personalization to the customer experience. AI and computer vision are used to precisely determine body measurements from a simple questionnaire or a body selfie right in websites or smartphone app and deliver size recommendation with detailed fit prediction based on the customer's body and garment properties.



## BRONZE Exhibitors

### Gertsch Consulting & Mode Vision (Switzerland) [gertsch.ch](http://gertsch.ch)

Gertsch Consulting & Mode Vision is specialized on products, solutions and services for the apparel and fashion industry. Gertsch Consulting & Mode Vision offers manufacturers and suppliers of individualized made-to-measure clothing, the "pod-Pattern on Demand", a platform for digitizing the processing from the e-commerce to the finished layplan/marker for the cutting room.



### DittoForm Michigan (USA) [www.dittoform.com](http://www.dittoform.com)

DittoForm Michigan produces the custom dress forms DittoForms. The precision carved, high-resolution dress forms are made by starting with a 3D body scan and by translating the digital files into a physical figure. DittoForm is a copy, a "ditto", of a real person and captures significant details of the body shape. This means the form also includes important landmark references when fitting clothes or developing patterns.



### 3D Body Cloud (Belgium) [3dbodycloud.com](http://3dbodycloud.com)

3D Body Cloud is a software company that offers cloud services for processing 3D full body scans. 3D Body Cloud's API supports back offices by offering automated processing pipelines to turn raw 3D scans into producible and/or publishable results, such as 3D printed figurines, 2.5D products, rigged models and animation videos.



### HOLOFIL by Artosci (The Netherlands) [www.holofil.com](http://www.holofil.com)

HOLOFIL by Artosci is a 3D visualization tabletop device that creates engaging visual experiences for promotions, product marketing, branding, education and training. It can be used in different scenarios including retail, healthcare, events, gaming, education. HOLOFIL's mixed reality mode allows combination of physical objects and virtual content to create engaging visual stories.



### Presize.ai (Germany) [presize.ai](http://presize.ai)

Presize.ai helps fashion online shops reduce returns, increase conversions and personalize the UX based on users' individual body. Users just turn around once in front of their smartphone camera and receive size recommendations for every clothing item. The patent pending video scanning technology is as accurate as a professional tailor's manual measurements.



### Bodyform3D (Canada) [www.bodyform3d.com](http://www.bodyform3d.com)

Bodyform3D leverages computer vision and machine learning to provide 3D body scanning software available from any mobile devices. Bodyform3D builds ready-to-use mobile applications optimized for the custom-made and healthcare industry to give the power to seamlessly integrate accurate individual's morphological data.



### Shape Analysis (UK) [shapeanalysis.com](http://shapeanalysis.com)

Shape Analysis is the exclusive worldwide distributor of the CAESAR 3-D Anthropometric Database. The company has extensive experience in the development and use of 3D capture systems. Services of Shape Analysis have been used for the National Sizing Survey SizeUK, ShapeGB and for many other companies involved in apparel, health, fitness, sportswear, medical applications.



## BRONZE Sponsors

### Meshcapade (Germany) [meshcapade.com](http://meshcapade.com)

Meshcapade aims to revolutionize the world of human body modeling, sizing, and animation. Meshcapade employs a state of the art statistical model that encodes realistic shapes, sizes, and motions. The goal is to make animating, simulating, and recognizing human bodies effortless, and to bring realistic virtual humans into simulation and 3D environments.



### HOMETRICA CONSULTING (Switzerland) [www.hometrica.ch](http://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.



## Supporters

### City of Lugano (Switzerland) [www.lugano.ch](http://www.lugano.ch)

The city of Lugano is officially supporting the 3DBODY.TECH Conference & Expo. The welcome cocktail offered to all attendees on Tuesday evening has been made possible with the city's support.



## Conference Office

Conference office: HOMETRICA CONSULTING - Dr. Nicola D'Apuzzo  
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# 3DBODY.TECH

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## Conference & Expo

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