

# CONFERENCE PROGRAM



3<sup>rd</sup> International Conference and Exhibition on  
**3D Body Scanning Technologies**  
 Lugano, Switzerland, 16-17 October 2012

Organized by HOMETRICA CONSULTING - Dr. Nicola D'Apuzzo

[www.3dbodyscanning.org/2012](http://www.3dbodyscanning.org/2012)

## Program Outline

3 <sup>rd</sup> International Conference and Exhibition on 3D Body Scanning Technologies, Lugano, Switzerland, 16-17 October 2012				
Time	Tuesday 16 <sup>th</sup> October 2012		Wednesday 17 <sup>th</sup> October 2012	
08:00	Registration		Exhibition Setup	Registration
09:00	Opening Session * ▫		Exhibition	Technical Session 7 Body Scanning for Health & Sport
10:00				Technical Session 8 ▫ Body Scanning Systems
11:00	Coffee Break		Technical Session 9 Medical Applications II	Technical Session 10 * Body Scanning for Apparel III
12:00	Technical Session 1 Medical Applications I	Technical Session 2 Body Scanning for Apparel I	Lunch Break	
13:00	Lunch Break		Technical Session 11 Scanning Methods & Technologies	Technical Session 12 * Anthropometric Studies & Surveys
14:00	Lunch Break			
15:00	Technical Session 3 Medical Scanning Systems	Technical Session 4 ▫ Full Body Scanning	Coffee Break	
16:00	Coffee Break		Technical Session 13 Kinect Body Scanning	Technical Session 14 Body Scanning for Apparel IV
17:00	Technical Session 5 Digital Anthropometry	Technical Session 6 Body Scanning for Apparel II		
18:00	Welcome Cocktail		Closing Session	
				Exhibition Breakdown

\* Sessions with invited speakers and/or keynote presentations

▫ Sessions with world/international premieres

## Conference Office



HOMETRICA CONSULTING - Dr. Nicola D'Apuzzo  
 Via Collegio 28, CH-6612 Ascona, Switzerland  
[www.hometrica.ch](http://www.hometrica.ch) [info@hometrica.ch](mailto:info@hometrica.ch)

Conference website: [www.3dbodyscanning.org](http://www.3dbodyscanning.org)  
 Conference email: [info@3dbodyscanning.org](mailto:info@3dbodyscanning.org)  
 Conference phone: +41.91.791.5524

## CONFERENCE PROGRAM



3<sup>rd</sup> International Conference and Exhibition on  
**3D Body Scanning Technologies**  
Lugano, Switzerland, 16-17 October 2012

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www.3dbodyscanning.org/2012

### Tuesday 16<sup>th</sup> October 2012

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

09:30-11:30 **Opening Session** – Room B1

Session Chair: Dr. N. D'Apuzzo  
Hometrica Consulting (Switzerland)



Welcome speech from the conference director

*N. D'Apuzzo*

*Hometrica Consulting, Switzerland*



From Scans to Avatars: Using Multi-Viewpoint, High Precision

3D Surface Imaging to Create Realistic Deformable Models of the Body

*C. Lane<sup>1</sup>, M.J. Black<sup>2</sup>*

*<sup>1</sup>3dMD LLC, Atlanta (GA), USA, <sup>2</sup>Max Planck Institute for Intelligent Systems, Tübingen, Germany #45*

world premiere



Digital Convergence in IT and Fashion: i-Fashion

*Invited speaker: C.K. Park*

*Konkuk University, Seoul, S. Korea #23*



Using the Body to Design for the Body

*Invited speaker: S. Summit*

*Bespoke Innovations Inc., San Francisco (CA), USA #57*

11:30-12:00 **Coffee Break** – Foyer

12:00-13:30 **Technical Session 1: Medical Applications I** – Room C

Session Chair: Dr. M. Jezersek  
University of Ljubljana (Slovenia)



Computer Assisted Optimization of Prosthetic Socket Design  
for the Lower Limb Amputees Using 3-D Scan

*F. v Waldenfels<sup>1</sup>, S. Raith<sup>1</sup>, M. Eder<sup>1</sup>, A. Volf<sup>1</sup>, J. Jalal<sup>2</sup>, L. Kovacs<sup>1</sup>*

*<sup>1</sup>CAPS (Computer Aided Plastic Surgery), Technische Universität München, Munich, Germany*

*<sup>2</sup>Institute of Medical Engineering at the Technische Universität München, Garching, Germany #52*



3D In-Vivo Measurement of Skin Topography Using Photometric Stereo

*A. Sohaib<sup>1</sup>, A. Farooq<sup>1</sup>, L. Smith<sup>1</sup>, M. Smith<sup>1</sup>, R. Warr<sup>2</sup>*

*<sup>1</sup>University of the West of England, Bristol, UK, <sup>2</sup>North Bristol NHS Trust, UK #50*



3D Skin Texture Analysis: A Neural Network and Photometric Stereo Perspective

*S. Anwar, L. Smith, M. Smith*

*University of the West of England, Bristol, UK #56*



Voxel Modeling Versus Nurbs and Mesh Modeling in Medical Applications

*A. Köster*

*Antonius Köster GmbH & Co. KG., Meschede, Germany #66*

12:00-13:30 **Technical Session 2: Body Scanning for Apparel I** – Room B1

Session Chair: Dr. D. Bruner  
Size Stream (USA)



Investigation into the Fit and the Distribution of Air Gaps of the Protective Jackets to Female Body Form

*N. Nawaz, O. Troynikov, K. Kennedy*

*RMIT University, Melbourne, Australia #02*



Use of 3D Body Scanning Technique for Heat and Mass Transfer Modelling in Clothing

*A. Psikuta<sup>1</sup>, J. Frackiewicz-Kaczmarek<sup>1,2</sup>, R.M. Rossi<sup>1</sup>*

*<sup>1</sup>Empa, St. Gallen, Switzerland, <sup>2</sup>University of Haute Alsace, Mulhouse, France #19*



3D Body Scanning for Examining Active Body Positions: A Pilot Study of Re-Designing Scrubs

*F. Baytar, J. Aultman, J. Han*

*Iowa State University, Ames (IA), USA #18*



Investigation on Body Shaping Garments Using 3D-Body Scanning Technology and 3D-Simulation Tools

*M. Ernst, U. Detering-Koll, D. Güntzel*

*Niederrhein University of Applied Sciences, Mönchengladbach, Germany #37*

13:30-15:00 **Lunch Break**

15:00-16:30 **Technical Session 3: Medical Scanning Systems – Room C**

Session Chair: Prof. M. Markey  
The University of Texas at Austin (USA)



Handheld 3D Measuring System Based on DSLR Camera  
U. Pavlovcic, M. Jezersek, J. Mozina  
University of Ljubljana, Slovenia #40



Device and Method for Precise Repositioning of Subjects for 3D Imaging of Head, Face, and Neck  
R.C. Roth, M. DePauw, A. Hepner  
Amway Corp., Ada (MI), USA #09



Novel Photometric Stereo Based Pulmonary Function Testing  
J. Ahmad<sup>1</sup>, J. Sun<sup>1</sup>, L. Smith<sup>1</sup>, M. Smith<sup>1</sup>, J. Henderson<sup>2</sup>, A. Majumdar<sup>3</sup>  
<sup>1</sup>University of the West of England, Bristol, UK, <sup>2</sup>Bristol University, UK, <sup>3</sup>Frenchay Hospital, Bristol, UK #29



How to Make 3D Scanning Easy, Fast and Reliable  
M. Babin  
TechMed 3D, St-Nicolas (QC), Canada #61

15:00-16:30 **Technical Session 4: Full Body Scanning – Room B1**

Session Chair: J.M. Surville  
Lectra (France)



An Overview of 3D Body Scanning History – And a Look Forward  
D. Bruner  
Size Stream, Cary (NC), USA #48

world premiere



VITUS 3D Body Scanner  
M. Maurer  
Vitronic GmbH, Wiesbaden, Germany #25



Low-Cost Garment-Based 3D Body Scanner  
N. Biasi, F. Setti, M. Tavernini, A. Fornaser, M. Lunardelli, M. Da Lio, M. De Cecco  
University of Trento, Italy #35

16:30-17:00 **Coffee Break – Foyer**

17:00-18:30 **Technical Session 5: Digital Anthropometry – Room C**

Session Chair: Dr. B. Bradtmiller  
Anthrotech (USA)



Robust Automatic Labelling of Anatomical Landmarks on 3D Body Scans  
A. Giachetti, C. Lovato, U. Castellani, C. Zancanaro  
University of Verona, Italy #07



Three-Dimensional Analysis of Facial Asymmetry of Healthy Hispanic Children  
J. Lee<sup>1,2</sup>, B. Ku<sup>1</sup>, A.C. Da Silveira<sup>1,3</sup>, M. K. Markey<sup>1,2</sup>  
<sup>1</sup>The University of Texas at Austin, Austin (TX), USA, <sup>2</sup>The University of Texas MD Anderson Cancer Center, Houston (TX), USA, <sup>3</sup>Dell children's Craniofacial & Reconstructive Plastic Surgery, Austin (TX), USA #11



Which Waist Girth? An Analysis Using 3D Scanning  
N. Daniell, T. Olds, G. Tomkinson  
University of South Australia, Australia #51



Collecting Large Scale Anthropometric Samples Around the World  
C. Lane  
3dMD LLC, Atlanta (GA), USA #44

17:00-18:30 **Technical Session 6: Body Scanning for Apparel II – Room B1**

Session Chair: Dr. S.H. Lin  
University of Hawaii at Manoa (USA)



The Power of Aggregate Data; Gaining Insights and a Competitive Advantage  
R. Kutnick, J. Gould-Thorpe  
Me-ality, Unique Solutions Ltd, Dartmouth (NS), Canada #62



A Commercial System for the Practical Generation of 3D Imaging and Measurement from 2D Camera Hardware  
D. Evans  
Poikos Ltd., Birginham, UK #65



Estimation of Fit in Calves for Supporting Internet Boot Sales  
D. Omrčen, T. Vidič  
UCS Universal Customization System d.o.o., Vrhnika, Slovenia #06



Right Shoes - Architecture of the Project and Application Sectors  
S. Dulio  
UTD - Unique Trend Developments SA, Massagno, Switzerland #69

18:30-20:30 **Welcome Cocktail – Foyer**

08:00-08:50 **Registration – Welcome Desk**

08:50-10:00 **Technical Session 7: Body Scanning for Health & Sport – Room C**

Session Chair: Dr. A. Psikuta  
EMPA (Switzerland)



3D Virtual Images as a Motivational Tool for an Individual's Exercise and Diet  
Y.-A. Lee  
Iowa State University, Ames (IA), USA #04



Volumetric Differences in Body Shape Among Adults with Different Body Mass Index Values: An Analysis Using 3D Body Scans  
N. Daniell, T. Olds, G. Tomkinson  
University of South Australia, Mawson Lakes (SA), Australia #43



Calculating Body Segment Inertia Parameters from a Single Rapid Scan Using the Microsoft Kinect  
S. Clarkson, S. Choppin, J. Hart, B. Heller, J. Wheat  
Sheffield Hallam University, UK #31

08:50-10:00 **Technical Session 8: Body Scanning Systems – Room B1**

Session Chair: Prof. A. Giachetti  
University of Verona (Italy)



A Full-Range of 3D Body Scanning Solutions  
J.-L. Rennesson  
TELMAT Industrie SA, Soultz, France #49



New Portable 3D Body Scanner - Cartesia BS03  
M. Hayashi  
Spacevision Inc., Tokyo, Japan #55

world premiere



The Breakthrough Potential for Dynamic High-Frame Rate 3D Dense Surface Capture  
C. Lane  
3dMD LLC., Atlanta (GA), USA #46

10:00-10:30 **Coffee Break – Foyer**

10:30-12:00 **Technical Session 9: Medical Applications II – Room C**

Session Chair: C. Lane  
3dMD (USA)



Breast Curvature of the Upper and Lower Breast Mound: 3D Analysis of Patients who Underwent Breast Reconstruction  
J. Lee<sup>1,2</sup>, G.P. Reece<sup>2</sup>, M.K. Markey<sup>1,2</sup>  
<sup>1</sup>The University of Texas at Austin, Austin (TX), USA,  
<sup>2</sup>The University of Texas MD Anderson Cancer Center, Houston (TX), USA #14



Semi-Automated Registration of 3D Torso Images from Breast Reconstruction Surgery  
L. Zhao<sup>1</sup>, S.K. Shah<sup>1</sup>, G.P. Reece<sup>2</sup>, M.A. Crosby<sup>2</sup>, E.K. Beahm<sup>2</sup>, M.C. Fingere<sup>2</sup>, M.K. Markey<sup>2,3</sup>, F.A. Merchant<sup>1</sup>  
<sup>1</sup>University of Houston, USA, <sup>2</sup>The University of Texas MD Anderson Cancer Center, Houston (TX), USA,  
<sup>3</sup>The University of Texas at Austin, USA #15



Breast Reconstruction Using Patients Own Tissue Based on CT Angiography and 3-D Surface Scanning  
J. Jalali<sup>1</sup>, M. Eder<sup>2</sup>, S. Raith<sup>2</sup>, A. Volf<sup>2</sup>, F. v Waldenfels<sup>2</sup>, L. Kovacs<sup>2</sup>  
<sup>1</sup>Institute of Medical Engineering at the Technische Universität München, Garching, Germany  
<sup>2</sup>CAPS (Computer Aided Plastic Surgery), Technische Universität München, Munich, Germany #53



Finite Element Simulation of the Deformation of the Female Breast Based on MRI Data and 3-D Surface Scanning: An In-Vivo Method to Assess Biomechanical Material Parameter Sets  
S. Raith<sup>1</sup>, M. Eder<sup>1</sup>, F. v Waldenfels<sup>1</sup>, J. Jalali<sup>2</sup>, A. Volf<sup>1</sup>, L. Kovacs<sup>1</sup>  
<sup>1</sup>Research Group CAPS (Computer Aided Plastic Surgery), Technische Universität München, Munich, Germany  
<sup>2</sup>Institute of Medical Engineering at the Technische Universität München, Garching, Germany #54

10:30-12:00 **Technical Session 10: Body Scanning for Apparel III – Room B1**

Session Chair: Dr. O. Troynikov  
RMIT University (Australia)



Keynote: The Return of Craft Designer (Pattern Maker) Re-Valued Through the New 3D Technologies  
J.-M. Surville  
Lectra, Cestas, France #58



Fit Visualization and Simulation on Individual 3D Scans  
U. Botzenhardt  
Human Solutions GmbH, Keiserslautern, Germany #59



3D Digital Technology from Concept to Consumer  
R. Sareen<sup>1,2</sup>  
<sup>1</sup>Tukatech Inc., Los Angeles (CA), USA, <sup>2</sup>Styku LLC, Los Angeles (CA), USA #24



Applied Use 3D Scan Data for Custom Fit Clothing  
S. Holt<sup>1</sup>, S. Shan<sup>2</sup>  
<sup>1</sup>Holt Consulting Ltd., Vancouver (BC), Canada, <sup>2</sup>Optitex International, Petach-Tikva, Israel #67

12:00-13:30 **Lunch Break**

**13:30-15:30 Technical Session 11: Scanning Methods & Technologies – Room C**Session Chair: Dr. Y.A. Lee  
Iowa State University (USA)

## Simple Shape-from-shading for Human Surface Measurement

Harvey Mitchell  
University of Newcastle, Australia #10

## Laser Based Real-Time Measurement of Thorax 3D Deformation with Motion Compensation

K. Povšič, J. Možina, M. Jezeršek  
University of Ljubljana, Slovenia #34

## Improving the Quality of Measurements through the Implementation of Customised Standards

A. Robinson<sup>1</sup>, M. McCarthy<sup>1</sup>, L. Zou<sup>2</sup>, S. Brown<sup>1</sup>, A. Evenden<sup>1</sup>  
<sup>1</sup>National Physical Laboratory, Teddington, UK,  
<sup>2</sup>Barts and The London School of Medicine and Dentistry, Queen Mary University of London, UK #13

## A Single-Shot and Real-Time 3D Imaging Technique for Facial Motion Capture

Based on Triple-Frequency Color Fringe Projection  
X. Zhou<sup>1,2</sup>, T. Yang<sup>1</sup>, H. Zhao<sup>1</sup>, A.G. Podoleanu<sup>2</sup>  
<sup>1</sup>Xi'an Jiaotong University, Xi'an, Shaanxi, China, <sup>2</sup>University of Kent, Canterbury, UK #17

## Synchronized Multi-Camera 4D Video Capture Solutions Providing Photorealistic Video Data in Four Dimensions

R. Broadbridge  
4D View Solutions, Grenoble, France #68**13:30-15:30 Technical Session 12: Anthropometric Studies & Surveys – Room B1**Session Chair: Dr. Charoensiriwath  
NECTEC (Thailand)

## Implementation and Analysis of Size Korea Projects using 3D Body Scanning Systems

*Invited Speaker: C.K. Park*  
Konkuk University, Seoul, S. Korea #22

## SizelTALY - The Actual Italian Measurement Survey

P.V. Stampfli<sup>1</sup>, A. Rissiek<sup>2</sup>, R. Trieb<sup>2</sup>, A. Seid<sup>2</sup>  
<sup>1</sup>Sistemi Assyst s.r.l., Lainate (MI), Italy, <sup>2</sup>Human Solutions GmbH, Keiserslautern, Germany #60

## Australian Apparel Anthropometric 3D Database (AAA3D): A Collaborative Approach

K. Kennedy<sup>1</sup>, J. Kellock<sup>2</sup>, O. Troynikov<sup>1</sup>  
<sup>1</sup>RMIT University, Melbourne, Australia, <sup>2</sup>Council of Textiles and Fashion Industries of Australia #03

## Comparison of Female Shape Analysis Methods for the Development of a New Sizing System

J. Webster, J. Cornolo, Y. Kelkel  
Oxylane Research, Villeneuve-d'Ascq, France #08

## 3D Hand Measuring with a Mobile Scanning System

A. Klepser<sup>1</sup>, M. Babin<sup>2</sup>, C. Loercher<sup>2</sup>, E. Kirchdoerfer<sup>1</sup>, J. Beringer<sup>1</sup>, A. Schmidt<sup>1</sup>  
<sup>1</sup>Hohenstein Institut fuer Textilinnovation gGmbH, Boennigheim, Germany, <sup>2</sup>TechMed 3D, St. Nicolas, Canada #39**15:30-16:00 Coffee Break – Foyer****16:00-17:30 Technical Session 13: Kinect Body Scanning – Room C**Session Chair: Dr. N. Daniell  
University of S. Australia (Australia)

## 3D Scanning with Multiple Depth Sensors

J. Kilner A. Neophytou A. Hilton  
University of Surrey, Guildford, UK #41

## Exploratory Analysis of College Student's Satisfaction of Body Scanning with Kinect

S.H. Lin<sup>1</sup>, R. Johnson<sup>2</sup>, D. Stricker<sup>2</sup>, Y. Cu<sup>3</sup>  
<sup>1</sup>University of Hawaii at Manoa, Honolulu (HI), USA, <sup>2</sup>Wayne State University, Detroit (MI), USA,  
<sup>3</sup>DFKI - Kaiserslautern University, Germany #05

## Calibration-less Anthropometric Scanner Using GPU's

M. Gazziro, P. Scotton, H. Bittencourt, A. Osti  
Universidade de São Paulo, Brazil #16

## Microsoft Kinect for THz Sensor Management

P. Engström, M. Axelsson, M. Karlsson  
Swedish Defence Research Agency (FOI), Linköping, Sweden #38**16:00-17:30 Technical Session 14: Body Scanning for Apparel IV – Room B1**Session Chair: Prof. M. Ernst  
Niederrhein University (Germany)

## Revolutionising the Garment Industry in Thailand

S. Charoensiriwath  
National Electronics and Computer Technology Center, Pathumthani, Thailand #47

## The Body-ScanFIT System: The Importance of Population's Classification into Morphological

Families and of Anthropometric Mannequins in Apparel and Ergonomics

G. Sereni, L. Franceschi  
CAD Modelling Ergnomics Srl, Florence, Italy #64

## Identification of Textile Materials Properties in "Body-Clothes" Scanned Systems

I.S. Zvereva<sup>1</sup>, V.E. Kuzmichev<sup>1</sup>, D.C. Adolphe<sup>2</sup>, L. Schacher<sup>2</sup>  
<sup>1</sup>Ivanovo State Textile Academy, Ivanovo, Russia, <sup>2</sup>University of Haute Alsace, Mulhouse, France #27**17:30-17:45 Closing Session – Room B1**

## Closing speech and announcements for 3DBST 2013

N. D'Apuzzo  
Hometrica Consulting, Zurich/Ascona, Switzerland

## CONFERENCE HIGHLIGHTS

### Opening Session

Tuesday, 09:00-10:30, Room B1

#### **From Scans to Avatars: Using Multi-Viewpoint, High Precision 3D Surface Imaging to Create Realistic Deformable Models of the Body**

Chris LANE – 3dMD LCC, Atlanta (GA), USA

Prof. Dr. Michael J. BLACK - Max Planck Institute for Intelligent Systems, Tübingen, Germany

Chris Lane is chairman and CEO of 3dMD, the world leader in 3D body scanning for medical applications. Prof. Dr. Michael J. Black is director of the Perceiving Systems Department at the Max Planck Institute for Intelligent Systems (Germany) and adjunct Professor at the Department of Computer Science of Brown University (USA). Mr. Lane and Prof. Black will jointly held the first technical presentation of the conference.

At the first Lugano Conference in 2010 Michael Black outlined his vision to Chris Lane for the development of a personalized avatar of complex human body movements calibrated by a streamlined workflow of 3D body scans. During the conference 3dMD publically launched its new generation of very fast 3D body surface capture devices which Michael felt could be developed to support his long term software research. At the second conference a video of the pre-delivery 3Dbody system developed for Michael's group was shown. Less than one year after commissioning the equipment, Chris and Michael will be showing a fully functional hardware and software process which results in the production of a spatially precise dynamic avatar which can be subsequently edited and posed. The process of going from a "scan" to an "avatar" is fully automatic, does not require landmarking, and the resulting avatar is easily edited to change its shape and pose. The joint presentation will highlight the development of a very focused commercial-academic partnership and debut the resultant technology with videos and demonstrations that have not been seen before at a public event. The presenters will conclude by summarizing the commercial potential for this approach to dynamic 3D body metrics.



#### **Digital Convergence in IT and Fashion: i-Fashion**

*Invited speaker* Prof. Dr. Chang Kyu PARK - Konkuk University, Seoul, S. Korea

Prof. Dr. Chang Kyu Park is director of i-Fashion Technology Center and associate professor at Konkuk University, Seoul, South Korea. His first speech at the opening session will present and discuss the achievements of the i-Fashion project.

The i-Fashion Technology Center in Korea operates one of the world's most advanced set-ups of virtual reality. Using virtual models based on an 3D body scan, consumers get personalized recommendations of products they may like. At the same time, vendors' efficiency increases due to the virtual, and not physical, representation of products for most stages of the value chain.



#### **Customized 3D Printed Legs for Amputees on the Basis of 3D Scan Data**

*Invited speaker* Scott SUMMITT - Bespoke Innovations Inc., San Francisco (CA), USA

Scott Summit founded Bespoke Innovations in 2010 based on 20 years of experience and research in design and additive fabrication.

The speech of Mr. Summit will regard the creation of customized 3D printed legs for amputees. The personalized design of the prosthetics is based on 3D scan data of the customer.



### Keynote Presentation – Body Scanning for Apparel III

Technical Session 10, Wednesday, 10:30, Room B1

#### **The Return of Craft Designer (Pattern Maker) Re-Valued Through the New 3D Technologies**

Jean-Marc SURVILLE - Lectra, Cestas, France

Jean-Marc Surville is an industrial engineer at Lectra (France). He has a very large practical experience in the treatment, processing and use of 3D body scan data for applications related to apparel and anthropometry.

His keynote speech at the conference will focus on the positive contribution of new 3D technologies for the creative work in the world of fashion and apparel.



### Invited Speaker – Anthropometric Studies & Surveys

Technical Session 12, Wednesday, 13:30, Room B1

#### **Implementation and Analysis of Size Korea Projects Using 3D Body Scanning Systems**

*Invited speaker* Prof. Dr. Chang Kyu PARK - Konkuk University, Seoul, S. Korea

The second speech of Prof. Dr. Chang Kyu Park will focus on the results obtained by the large scale measurement campaign Size Korea.



## Conference Exhibition

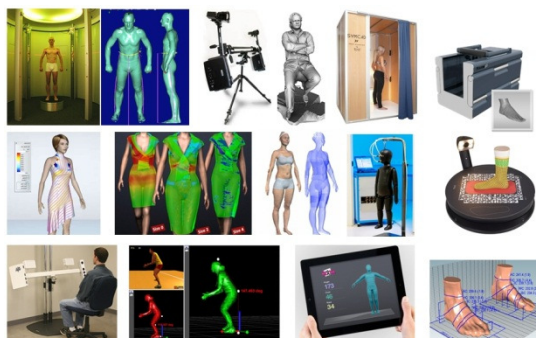
Tuesday 9:00 - Wednesday 15:00, Room B2/3

In the parallel exhibition, various manufacturers of equipment will demonstrate live their 3D body scanning systems and software solutions.

Different scanning technologies are represented: laser scanning, white light scanning, passive photogrammetry, etc.

Different systems will be shown: full body scanners, foot scanners, modular scanning systems, hand-held scanners and software solutions.

The attendees will have the possibility to test live the systems and to meet and discuss directly with the manufacturers and resellers.



## World & International Premieres

### 3dMD (USA) – Max Plank Institute (Germany)

#### Opening Session

Chris Lane, chairman and CEO of 3dMD, and Prof. Dr. Michael J. Black, director at the Max Planck Institute for Intelligent Systems (Germany), will jointly hold the first technical presentation of the conference. The joint presentation will highlight the development of a very focused commercial-academic partnership and debut the resultant technology with videos and demonstrations that have not been seen before at a public event.



### TechMed 3D (Canada) – Creaform (Canada)

#### Exhibition

TechMed 3D will have the privilege of introducing the world premiere of the fast, easy and reliable new scanner from Creaform, the GO! SCAN 3D. TechMed 3D have optimized its software MSoft with the scanner integrating the most user-friendly solution for digitization of the human body on the market. Live demonstrations at the technical exhibition.



### SpaceVision (Japan)

#### Exhibition and Technical Session 8

SpaceVision will demonstrate at the exhibition the very new version of its portable, compact, light, fast 3D full body scanner. The technical details will be presented during Technical Session 8.



### Elinvisin (Lithuania) – UCS (Slovenia)

#### Exhibition

Elinvisin and UCS will demonstrate at the exhibition the new jointly developed 3D foot scanner for best fit shoe selection. Live demonstrations at the technical exhibition.



### SizeStream (USA)

#### Technical Session 4

Dr. David Bruner, Vice President of the newly launched company SizeStream will hold a presentation at Technical Session 4. Discarding old technology from the past, SizeStream is developing a new generation of body scanner, complete from scratch.



## Welcome Cocktail

Tuesday, 18:30-20:30, Foyer

A welcome cocktail with local gastronomy products and wine of the region is offered to all participants at the evening of the first day of the conference. The welcome cocktail is kindly offered by the organizer Hometrica Consulting.



## SUPPORTERS

### Repubblica e Cantone Ticino (Switzerland) – [www.ti.ch/sviluppo-economico](http://www.ti.ch/sviluppo-economico)

The Finance and Economics Department of Canton Ticino is supporting the conference. Representatives of the economic promotion office will be present at the conference to illustrate the opportunities offered by the region for new business initiatives.



Repubblica e Cantone  
Ticino

### Lugano Turismo (Switzerland) – [www.luganoturismo.ch](http://www.luganoturismo.ch)

The tourist organization of Lugano is supporting the conference. The tourist office provides any tourist information regarding Lugano and surrounding areas.



### Amiconi Consulting (Switzerland) – [www.amiconiconsulting.ch](http://www.amiconiconsulting.ch)

Amiconi Consulting is supporting the conference. The service company will take care of the hotel reservations for attendees of the conference and provide on request private transportation from and to Milan airports.



## LIST OF EXHIBITORS

### **3dMD (USA) – [www.3dmd.com](http://www.3dmd.com)**

3dMD is the world leader in 3D body scanning for medical applications, with well more than 1,400 3D cameras worldwide. The ultra-fast high-precision 3D surface imaging devices and the powerful software application software will be demonstrated at the conference exhibition.



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

TechMed 3D is an high tech company specializing in body measurement technologies and digital imaging solutions adapted to the orthotics, prosthetics and custom equipment market. 3D imaging devices and application software will be demonstrated at the conference exhibition.



### **4D View Solutions (France) – [www.4dviews.com](http://www.4dviews.com)**

4D View Solutions provides complete hardware and software platforms for the capture of photorealistic videos in 3D. The systems enable to film a dynamic scene and output a photorealistic 3D video of the filmed subject for real-time or offline analysis and applications.



### **SpaceVision (Japan) – [www.space-vision.jp](http://www.space-vision.jp)**

SpaceVision is a leading manufacturer of innovative 3D imaging solutions used in various application fields. At the exhibition of the conference, SpaceVision will demonstrate its portable, small, light, fast 3D full body scanner.



### **VITRONIC (Germany) – [www.vitronic.com](http://www.vitronic.com)**

VITRONIC, a world leading organization in the field of machine vision, is developer and manufacturer of body scanning systems employed by Human Solutions. At the exhibition, VITRONIC will demonstrate its 3D full body scanner VITUS.



### **Human Solutions (Germany) – [www.human-solutions.com](http://www.human-solutions.com)**

Human Solutions is a world market leader for body scanning and ergonomics simulation. Systems from Human Solutions are used by more than 300 companies worldwide. Human Solutions will jointly participate at the exhibition with VITRONIC.



### **TELMAT Industrie (France) – [www.symcad.com](http://www.symcad.com)**

TELMAT is a world leader in 3D body scanning and automated body measurement. The high-speed 3D digitization process SYMCAD has enabled to scan and measure more than 800'000 individuals nowadays. SYMCAD 3D body scanner will be presented at the exhibition.



### **Lectra (France) – [www.lectra.com](http://www.lectra.com)**

Lectra is the world leader in integrated technology solutions for industries using textiles to manufacture their products. Lectra will demonstrate Modaris, the apparel pattern-making and grading software solution with fully-integrated 3D virtual prototyping technology.



### **ELINVISION (Lithuania) – [www.elinvision.com](http://www.elinvision.com)**

ELINVISION designs and produces measuring and control devices, machine vision systems, 3D laser scanners, digital dental cameras and software. At the conference exhibition, ELINVISION will demonstrate its 3D foot scanner.



### **UCS (Slovenia) – [www.ucstech.eu](http://www.ucstech.eu)**

UCS d.o.o. (Slovenia) has been established to offer footwear manufacturing and retail companies sophisticated solutions for providing the best fitting footwear to their customers. At conference exhibition will be presented jointly with Elinvision the new best fit shoe selection scanner.



### **corpus.e (Germany) – [www.corpus-e.com](http://www.corpus-e.com)**

corpus.e designs 3D imaging and 3D scanning systems. At the conference exhibition, corpus.e will demonstrate its 3D foot scanning and measurement system lightbeam, based on the patented MagicalSkin technology.



### **Right Shoes - UTD SA (Switzerland) – [www.rightshoes.ch](http://www.rightshoes.ch)**

UTD - Unique Trend Developments has developed Right Shoes, an online assistant that can suggest the right size to choose during shoes on-line shopping on websites of footwear brands, manufacturers and e-commerces. Right Shoes will be demonstrated at the conference exhibition.



### **Poikos (UK) – [www.poikos.com](http://www.poikos.com)**

Poikos has developed the core technology of FlixFit: a body measurement solution for e-commerce which uses ordinary webcams, tablets and smartphones. This enables a quick and simple way for users to find out their size, and make more informed choices about the clothes that they buy.



### **Tukatech - Styku (USA) – [www.tukatech.com](http://www.tukatech.com), [www.styku.com](http://www.styku.com)**

Tukatech provides pattern making, grading and marker making software, 3D apparel prototyping systems and manufacturing equipment. It also has created Styku, the webs only virtual fitting room that truly simulates fit in 3D, developed for on-line apparel sales.



### **CAD Modelling Ergonomics (Italy) – [www.cadmodelling.it](http://www.cadmodelling.it)**

CAD Modelling Ergonomics produces tailor dummies, fit mannequins and anthropometric fashion dummies for fitting control and the portable 3D full body scanning system Body-ScanFit.



### **DNA Interactif Fashion BVBA (Belgium) – [www.dnainteractiffashion.com](http://www.dnainteractiffashion.com)**

DNA Interactif Fashion BVBA has developed iStyling, a software platform that offers fashion in all possibilities. With iStyling, users can consult their body measurements and personalized avatar, and use the platform to buy apparel, accessories, styling, advices.

