

3D-NordOst 2023

30 NOV - 01 DEC 2023, BERLIN-ADLERSHOF



Gesellschaft zur Förderung angewandter Informatik e. V.

25TH APPLICATION-ORIENTED WORKSHOP
ON MEASURING, MODELING, PROCESSING
AND ANALYSIS OF 3D-DATA

REGISTRATION / FEES

The workshop will be held as a hybrid event. You can take part in the event at the GFaI or online (we will send you the corresponding access data).

Registration at:

www.gfai.de/en/news/events/workshop-3d-nordost/registration

The conference fees (incl. proceedings):

PRESENCE

Regular 60,- Euro Reduced 40,- Euro

ONLINE

Regular 40,- Euro Reduced 20,- Euro

(Main) Speakers: Free participation. **GFaI members** and employees of institutions and companies located in **Berlin-Adlershof** pay a reduced fee. Free participation of **students** is possible, but limited (without conference proceedings, registration is required).

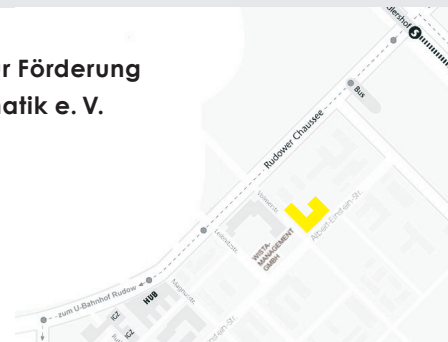
The conference fee is VAT free acc. §4 No. 22a UStG.

CONTACT

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Program Committee:

Dr. Stephan Rothstock (GFaI)
Benjamin Hohnhäuser (GFaI)
Daniel Krueger (GFaI)
Felicitas Böhm (GFaI)
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Prof. Holger Schlingloff (HU Berlin)

Workshop Organization:

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Event format:

still hybrid

Version: 16 NOV 2023

PROGRAM

3D-NordOst 2023

3D IN SCIENCE & APPLICATIONS

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www.3d-nordost.de

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OBJECTIVE / WORKSHOP PROGRAM, 30 NOV 2023

Objective

The workshop series is targeting the transfer of topical know-how in 3D-data and image processing to industrial sectors as well as to cultural and medical applications and practice. The workshop provides a platform for developers and users to discuss the broad spectrum of 3D related topics.

Interested authors are invited to submit algorithm- and application-oriented papers. Contributions focusing on sensor calibration, algorithmic optimization, visualization and presentation of 3D content are also welcome.

Workshop Program

11:00 *H. Schlingloff (Chairman of the GFal Board):*
Opening

3D Scan & Reconstruction

11:15 *M. Bookhahn (Ingenieurinformatik, Hochschule für Technik und Wirtschaft Berlin):*
ELV.xD - a modular framework for instance level recognition within spare part logistics

11:40 *T. Braun (Fraunhofer-IGP, Rostock):*
Vergleich von optischen 3D-Sensoren zur Feinreferenzierung eines Klebprozesses für schiffbauliche Komponenten

12:05 *Y. Y. Li (Arbeitsgruppe Aktives Sehen, Institut für Computervisualistik, Universität Koblenz):*
Evaluation of Depth Completion Using Solid-state LiDAR Dataset

WORKSHOP PROGRAM, 30 NOV 2023

12:30 *Lunch break*

3D Data Processing

13:15 *M. Riedel (deveritec GmbH, Dresden):*
Anwendbarkeit von KI-Methoden bei der photogrammetrischen Bestimmung von Kopfbewegungen in der Präzisionsstrahlentherapie – lessons learned

13:40 *St. Rothstock (GFal e. V., Berlin):*
Identifikation klinisch interpretierbarer Feature-Vektoren für die Analyse von Torso Surface-Topographie Daten

14:05 *W. Eppel (Ingenieurinformatik, HTW Berlin):*
Segment Anything Model für Zero-Shot 3D Bounding Box Prediction

MR & VR

14:30 *A. Beuster (FB II, Berliner Hochschule für Technik):*
Informationsaustausch zwischen einer MixedReality-Anwendung für Stadtplanungsprozesse und BIM-Systemen mit dem Standard BCF

14:55 **Come together**

WORKSHOP PROGRAM, 01 DEC 2023

Student Pitches

10:00 *ca. 10 presentations*

11:00 *Coffee break*

Company Presentation

11:30 *St. Kühr (Xolo GmbH, Berlin):*
Vorstellung und Firmenportrait des 3D-Druck-Start-ups Xolo aus Adlershof

3D Modeling & 3D Printing

11:40 *L. Maben (GFal e. V., Berlin):*
Entwicklung eines Verfahrens zur auflösungsangepassten Abschätzung der Schichtdicke in einer modellbasierten Auftragsimulation durch adaptive Granularisierung

12:05 *T. Jacobi (3D-Medico GbR, Berlin):*
KI-gestützte Umsetzung für den digitalen Prozess von 3D-gedruckten Orthesen

12:30 *B. Dhanani (Think 3DDD GbR, Berlin):*
Comparison of Digital Models with Production Models for Quality Assurance in 3D Printing of Medical Devices

12:55 *Lunch break*

13:40 *H. Brockmann (Berlin Heart GmbH):*
Virtuelles Fitting zur Unterstützung bei der Entwicklung von neuartigen Kanülen zur mechanischen Kreislaufunterstützung von Patienten mit univentrikulären Herzen

3D Scan & Reconstruction

14:05 *M. Kaiser (ETH Zürich):*
Minimal Required Resolution to Capture the 3D Shape of the Human Back – A Practical Approach

14:30 **Closing words**