

Publications

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MOTS CLÉS:

Modélisation géométrique par frontières
Modélisation géométrique à base topologique des objets 3D non-variétés
Subdivisions, compexes cellulaires
Acquisition, recalage et reconstruction
Maillages, courbures discrètes
Préservation de l'héritage culturel

- Conférences internationales à comité de lecture: [1], [2], [3], [4], [5], [6], [7], [8], [9], [10], [11], [12], [13], [14], [15], [16], [17], [18], [19], [20] [21]
- Conférences nationales à comité de lecture: [4], [22], [23], [24], [25], [26]
- Revues internationales à comité de lecture: [27], [28], [29]
- Revues nationales à comité de lecture: [30], [31], [32], [33], [34]
- Mémoires: [35]
- Rapports internes: [36], [37], [38], [39], [40]

References

- [1] S. Gueorguieva. New techniques for deformation of solids defined by sweeping. In *FEM'88, Proc. of the International Symposium*, volume 2, pages 213–218, Paris, France, October 1988.
- [2] S. Gueorguieva and H. Radev. An approach on set operation implementation for polyhedral objects. In *ISCG'90, Proc. of the International Symposium on Computational Geometry*, pages 39–48, Gausig, Dresden, Germany, 1990.

- [3] S. Gueorguieva and D. Marcheix. Non-manifold boundary representation for solid modeling. In *ICS'94, Proc. of the International Computer Symposium*, pages 897–904, Hsinchu, Taiwan, 1994.
- [4] S. Gueorguieva and D. Marcheix. Modélisation des objets non-variété: construction et représentation. In *AFIG'95, Actes des 3èmes Journées AFIG*, pages 113–124, Marseille, France, 1995.
- [5] D. Marcheix and S. Gueorguieva. Topological operators for non-manifold modeling. In *WSCG'95, Proc. of the 3rd International Conference in Central Europe on Computer Graphics and Visualisation*, pages 173–186, Plzen, Czech Republic, 1995.
- [6] B. Touron, D. Marcheix, and S. Gueorguieva. A note on sweeping of non-manifold objects. In *WGMCAD'96, Proc. of the 5th IFIP WG5.2 Workshop on Geometric modeling in CAD*, pages 116–125, Airlie, Virginia, 1996.
- [7] D. Marcheix and S. Gueorguieva. Nibble meshing: An algorithm for triangulation of non-manifold solid boundary. In *WSCG'97, Proc. of the 5th International Conference in Central Europe on Computer Graphics and Visualisation 97*, pages 351–360, Plzen, Czech Republic, 1997.
- [8] D. Marcheix and S. Gueorguieva. Composite triangular gregory-bezier surface with variable continuity. In *ICCADCGR'97, Proc. of the 5th International Conference on Computer-Aided Design and Computer Graphics*, pages 383–390, Shenzhen, China, 1997.
- [9] S. Gueorguieva, Rémi Synave, and Christine Couture-Veschambre. Teaching geometric modeling algorithms and data structures through laser scanner acquisition pipeline. In *ISVC (2)*, volume 6454 of *Lecture Notes in Computer Science*, pages 416–428. Springer, 2010.
- [10] P. Desbarats and S. Gueorguieva. Cw complexes: Topological mainframe for numerical representations of objects. In *ICCSA'03, Proc. of the International Conference on Computational Science and its Applications*, pages 498–507, Montreal, Canada, May 18-21 2003. Revisited version of [37].
- [11] S. Gueorguieva and P. Desbarats. Reconstruction of topology valid boundary of discrete object from 3d range images. In *ICVIIP'05, Proc. of the IASTED International Conference on Visualization, Imaging and Image Processing*, pages 388–392, Benidorm, Spain, September 7-9 2005. Revisited version of [38].
- [12] S. Gueorguieva, P. Desbarats, and R. Synave. Composite surfaces for discrete object boundary reconstruction. In *AGGM'06, Algebraic Geometry and Geometric Modeling*, Barcelona, Spain, September 4-7 2006.
- [13] R. Synave, P. Desbarats, and S. Gueorguieva. Automated trimmed iterative closest point algorithm. In *ISVC07, Proc of the 3rd International Symposium on Visual Computing*, Lake Tahoe, Nevada, California, November 26-28 2007.

- [14] R. Synave, P. Desbarats, and S. Gueorguieva. Toolkit for registration and evaluation for 3d laser scanner acquisition. In *WSCG'2008, Proc. of the 16th International Conference in Central Europe on Computer Graphics, Visualisation and Computer Vision'2008*, pages 199–204, Plzen, Czech Republic, February 4-7 2008.
- [15] R. Synave, S. Gueorguieva, and P. Desbarats. Constraint shortest path computation on polyhedral surfaces. In *ICVGIP'08, Proc. of the 6th Indian Conference on Computer Vision, Graphics and Image Processing*, Bhubaneswar, India, December 16-19 2008. Revisited version of [39].
- [16] B. Dutailly, H. Coqueugniot, P. Desbarats, S. Gueorguieva, and R. Synave. 3d surface reconstruction using hmh algorithm. In *ICIP'09, IEEE International Conference on Image Processing*, Cairo, Egypt, November 7-10 2009.
- [17] S. Gueorguieva, R. Synave, and Ch. Couture-Veschambre. Trochlear surface reconstruction and evaluation based on laser scanner acquisition. In *IST'2010, Image Systems and Techniques*, pages 320–324, Thessaloniki, Greece, July 1-2 2010.
- [18] H. Coqueugniot, Ch. Couture, B. Dutailly, S. Gueorguieva, P. Desbarats, and R. Synave. Range image processing for paleoanthropology heritage preservation. In *DMAMH'2007, Proc. of the 2nd IEEE International Workshop on Digital Media and Its Applications in Museum and Heritages*, Chongqing, China, December 10-12 2007.
- [19] P. Desbarats, S. Gueorguieva, R. Synave, H. Coqueugniot, and B. Dutailly. Digital anthropology for effective retrieval of the anterior fontanelle. In *The 10th European Congress of Stereology and Image Analysis*, Milano, Italy, June 22-26 2009. Revisited version of [40].
- [20] B. Dutailly, H. Coqueugniot, P. Desbarats, S. Gueorguieva, and R. Synave. From virtuality to reality: contributions of 3d printing. In *37th Annual CAA Conference: "Making History Interactive"*, Williamsburg, Virginia, USA, March 2009.
- [21] J. Charton, S. Gueorguieva, and P. Desbarats. Sinefitting: robust curvature estimation of surface triangulation. In *IADIS International Conference Computer Graphics, Visualization, Computer Vision and Image Processing*, pages 43–50, Prague, Czech Republic, July, 22-24 2013.
- [22] S. Gueorguieva and D. Marcheix. Nemo: Environnement de modélisation des objets non-variétés. In *AFIG'97, Actes des 5èmes Journées Modéleurs Géométriques*, Grenoble, France, 1997.
- [23] B. Dutailly, H. Coqueugniot, Ch. Couture, P. Courtaud, P. Desbarats, S. Gueorguieva, and R. Synave. Imagerie médicale et patrimoine anthropologique: vers un contrôle total de la chaîne des traitements dans

l'analyse morphométrique tridimensionnelle. In *VRARV'07, Virtual Retrospect, Archéologie et Réalité Virtuelle*, pages 45–51, Bordeaux, France, Novembre 14-16 2007.

- [24] R. Synave, S. Gueorguieva, and P. Desbarats. Calcul de chemin géodésique appliqué à la morphométrie numérique. In *AFIG'08, Actes des 21èmes journées de l'Association Française d'Informatique Graphique*, pages 181–189, Toulouse, France, November 2008.
- [25] R. Synave, S. Gueorguieva, and P. Desbarats. A2ri : une nouvelle chaîne de traitement pour la reconstruction/impression d'objets 3d issus d'acquisition au scanner laser. In *VRARV'09, Virtual Retrospect, Archéologie et Réalité Virtuelle*, Bordeaux, France, Septembre 2009.
- [26] J. Charton, S. Gueorguieva, and P. Desbarats. Courbures discrètes: outils d'évaluation de formes saillantes sur des maillages. In *AFIG'12, Actes des 25èmes journées de l'Association Française d'Informatique Graphique*, pages 69–83, Calais, France, November 2012.
- [27] S. Gueorguieva and D. Marcheix. Modélisation des objets non-variétés : construction et représentation. *Revue Internationale de CFAO et d'informatique graphique, version revisée de l'article présenté au 3èmes Journées AFIG, Marseille '95*, 11(4):405–421, 1996.
- [28] D. Marcheix and S. Gueorguieva. Nibble meshing: Incremental triangulation of non-manifold solid boundary. *Computers and Graphics*, 22(2-3):181–188, March/June 1998.
- [29] H. Coqueugniot, Ch. Couture, B. Dutailly, S. Gueorguieva, P. Desbarats, and R. Synave. Range image processing for paleoanthropology heritage preservation. *IACIS Journal of Computational Information Systems*, 4(4):1851–1859, 2008. Revisited version of [18].
- [30] H. Radev and S. Gueorguieva. Geometric modeling: fundamentals, methods and classification, systems (in bulgarian). *Automation, Computer Technique and Automation Systems*, (6), 1987.
- [31] H. Radev and S. Gueorguieva. Sygma- an experimental geometric modeling system. *Control Complex Systems*, (7):105–111, 1989.
- [32] S. Gueorguieva, D. Dimov, and H. Radev. Structural-informational problems in boundary representation solid modeling method. (in bulgarian). *Control Complex Systems*, (6), 1988.
- [33] S. Gueorguieva, D. Dimov, and H. Radev. Geometric modeling through procedural representation (in bulgarian). *Automation, Computer Technique and Automation Systems*, (10), 1988.

- [34] R. Synave, S. Gueorguieva, and P. Desbarats. Calcul de chemin géodésique appliqué à la morphométrie numérique. *Revue Electronique Francophone d'Informatique Graphique*, 5(1):1–16, 2011.
- [35] S. Gueorguieva. Geometric modeling through boundary representation elements. In *PhD Thesis, Bulgarian Academy of Sciences*, pages 1–159, 1990.
- [36] S. Gueorguieva. An overview of subdivision merging algorithms. Research rapport, postdoctoral education, ULP Strasbourg, 1991.
- [37] P. Desbarats and S. Gueorguieva. Cw complexes:topological mainframe for numerical representations of objects. Rr-1291-03, LaBRI, UMR 5800, Université Bordeaux 1, 2003.
- [38] S. Gueorguieva and P. Desbarats. Reconstruction of topology valid boundary of discrete object from 3d range images. Rr-1357-05, LaBRI, UMR 5800, Université Bordeaux 1, 2005.
- [39] R. Synave, S. Gueorguieva, and P. Desbarats. Constraint shortest path computation on polyhedral surfaces. Rr-1447-08, LaBRI, UMR 5800, Université Bordeaux 1, 2008.
- [40] P. Desbarats, S. Gueorguieva, R. Synave, H. Coqueugniot, and B. Dutailly. Strasbourg juvenile collection : Computer assisted anthropology for the anterior fontanelle reconstruction and size evaluation. Rr-1454-09, LaBRI, UMR 5800, Université Bordeaux 1, 2009.