**Productos subidos al CVLac**

**Artículos (20\_06\_2024):**

1. Accelerated Thermal Simulation for 3D Interactive Optimization of CNC Sheet Metal Laser Cutting
2. Implementation and Visualization of Discrete Computational Geometry Using Database Managers
3. Skin-friction Measurements in Turbulent Boundary Layers
4. Analytic Form Fitting in Poor Triangular Meshes
5. Computer graphics and visual computing use cases for Industry 4.0 and Operator 4.0
6. Experimental and computational assessment of minimizing overfill in trajectory corners by laser velocity control of laser cladding
7. Nonlinear thermal simulation of laser metal deposition
8. Measurement-Driven Synthesis of Female Digital Mannequin Using Convex Sub-Volumes
9. Computer supported toolpath planning for LMD additive manufacturing based on cylindrical slicing
10. Accelerating the design of gerotor pumps using interactive tools and fast simulation
11. On the shape description of general solids using Morse theory

**Conferencias (17\_07\_2024):**

1. STAG-2023 Smart Tools and Applications in Graphics - Eurographics Italian Chapter Conference

Producto asociado:

**An Approach to the Decomposition of Solids with Voids via Morse Theory**.

Pareja-Corcho, Juan and Montoya-Zapata, Diego and Moreno, Aitor and Cadavid, Carlos and Posada, Jorge and Arenas-Tobon, Ketzare and Ruiz-Salguero, Oscar.

STAG-2023 Smart Tools and Applications in Graphics - Eurographics Italian Chapter Conference. Matera (Italy) | 16 – 17 November 2023

ISSN: 2617-4855}, ISBN: 978-3-03868-235-6,

Publisher: The Eurographics Associatio

Pages: 135-144

Published: 2023

DOI: 10.2312/stag.20231302

URL: <https://diglib.eg.org:443/handle/10.2312/stag20231302>

1. 17th Colombian Conference on Computing

Producto asociado:

**Declarative Visual Programming with Invariant, Pre- and Post-conditions for Lattice Approximation of 3D Models.**

Ruiz-Salguero, O., Builes-Roldan, C., Lalinde-Pulido, J., Echeverri-Cartagena, C.

17th Colombian Conference on Computing, CCC 2023 Medellin, Colombia, August 10–11, 2023, Revised Selected Papers.

Print ISBN 978-3-031-47371-5, Online ISBN 978-3-031-47372-2

Publisher: Spinger Nature

Pages: 153-172

Published: 14 - Nov - 2023

DOI: https://doi.org/10.1007/978-3-031-47372-2\_15

URL: <https://link.springer.com/chapter/10.1007/978-3-031-47372-2_15>

1. Web3D Conference. 2023

Productos asociados:

**On Web Digital Twins: an use case for a Gerotor pump.**

JJuan Camilo Pareja-Corcho, Asier Pedrera-Busselo, John Ciarrusta, Aitor Moreno, Oscar Ruiz-Salguero, Jorge Posada.

Web3D Conference. 2023. 9-11 Oct 2023. San Sebastian, Spain.

ISBN 979-8-4007-0324-9

Publisher: ACM - SIGGRAPH

Article 10. Pages: 1-9

Proceedings of the 28th International ACM Conference on 3D Web Technology

Published 09 - Oct - 2023

DOI: https://doi.org/10.1145/3611314.3615905

URL: <https://dl.acm.org/doi/10.1145/3611314.3615905>

**Mobile-based Urban Bike Route Planner using Urban Regulation-constrained Delaunay Graph.**

Juan Gutierrez-Urrego, Jorge Correa, Placid Ferreira, Saul Rivera-Betancur, Oscar Ruiz-Salguero.

Web3D Conference. 2023. 9-11 Oct 2023. San Sebastian, Spain.

ISBN 979-8-4007-0324-9

Publisher: ACM - SIGGRAPH

Article 14. Pages: 1-10

Proceedings of the 28th International ACM Conference on 3D Web Technology

Published 09 - Oct - 2023

DOI: https://doi.org/10.1145/3611314.3615921

<URL:https://dl.acm.org/doi/pdf/10.1145/3611314.3615921>

1. CEIG – Spanish Computer Graphics Conference 2022.

Producto asociado:

**Cylindrical Transform Slicing of Revolute Parts with Overhangs for Laser Metal Deposition.**

Diego Montoya-Zapata, Aitor Moreno, Igor Ortiz, Oscar Ruiz-Salguero, Jorge Posada. CEIG – Spanish Computer Graphics Conference (2022). 6-8 July 2022. Vic, Spain.

ISBN: 978-3-03868-186-1

Publisher: The Eurographics Association

Pages: 17-21

Note: This manuscript is part of the Proceedings of the XXXI Spanish Computer Graphics Conference (CEIG 2022). Editors Jorge Posada, Ana Serrano (https://diglib.eg.org/handle/10.2312/2633203) Pages 17-21 (2022).

DOI: https://doi.org/10.2312/ceig.20221141

URL: <https://diglib.eg.org/handle/10.2312/ceig20221141>

**Ediciones (02\_07\_2024):**

1. Communications in Computer and Information Science (CCIS, volume 1924). 17th Colombian Conference on Computing, CCC 2023, Medellin, Colombia, August 10-11, 2023, Revised Selected Papers

**Tesis (Proyectos de graduación) (10\_07\_2024):**

1. Computational Geometry Contributions Applied to Additive Manufacturing
2. Computational Geometry Application in Parametric Modeling
3. Computational Geometry Application in Dimensional Assessment and Boundary Elements
4. Visual programming with invariant, pre- and post-conditions for approximation of a 3D model with assorted 1.5D and 2.5D lattice families
5. Computational Geometry Applications in Industry 4.0
6. Differential Operators on Manifolds for CAD CAM CAE and Computer Graphics
7. Encoding of Voxel Sets by Frequency Reduction in 3D Medial Axis (in preparation for external pubication)