Pooran Memari's publications

- *Linear-Time Transport with Rectified Flows,*
  Khoa Do, David Coeurjolly, Pooran Memari, Nicolas Bonneel.
  To appear in ACM Transactions on Graphics (conditionally accepted to ACM SIGGRAPH), 2025.

- *SING: Stability-incorporated neighborhood graph,*
  Diana Marin, Amal Dev Parakkat, Stefan Ohrhallinger, Michael Wimmer, Steve Oudot, Pooran Memari.
  Proceedings of ACM Siggraph Asia, 2024. pdf

- *Ink-Edit: Interactive color-constrained textures editing,*
  Charline Grenier, Pooran Memari, Basile Sauvage.
  Technical communication, ACM Siggraph Asia 2024. pdf

- *Points, Patterns and Shapes towards accessible geometric modeling,*
  Habilitation à diriger des recherches (HdR) Manuscript, IP-Paris 2024.

- *DynBioSketch: A tool for sketching dynamic visual summaries in biology, and its application to infection phenomena,*
  Pauline Olivier, Tara Butler, Pascal Guehl, Jean-Luc Coll, Renaud Chabrier, Pooran Memari, Marie-Paule Cani.
  Computers & Graphics Journal, 2024. pdf

- *BallMerge: High-quality Fast Surface Reconstruction via Voronoi Balls,*
  Amal Dev Parakkat, Stefan Ohrhallinger, Elmar Eisemann, Pooran Memari.
  Computer Graphics Forum, 2024. pdf

- *Ricci flow-based brain surface covariance descriptors for diagnosing Alzheimer's disease,*
  Fatemeh Ahmadi, Mohamad-Ebrahim Shiri, Behroz Bidabad, Maral Sedaghat, Pooran Memari.
  Biomedical Signal Processing and Control journal, Elsevier 2024. pdf

- *Bio-Sketch: A new medium for interactive storytelling, illustrated by the phenomenon of infection,*
  Pauline Olivier, Renaud Chabrier, Pooran Memari, Jean-Luc Coll, Marie-Paule Cani.
  Proceedings of Eurographics Workshop on Visual Computing
  for Biology and Medicine (EG VCBM), 2023. pdf

- *Feature-Sized Sampling for Vector Line Art,*
  Stefan Ohrhallinger, Amal D. Parakkat, Pooran Memari.
  Proceedings (short paper format) of Pacific Graphics 2023. pdf

- *Patternshop: Editing Point Patterns by Image Manipulation,*
  Xingchang Huang, Tobias Ritschel, Hans-Peter Seidel, Pooran Memari, Gurprit Singh.
  ACM Transactions on Graphics (Proceedings of SIGGRAPH), 2023. pdf

- *Robust Pointset Denoising of Piecewise-Smooth Surfaces through Line Processes,*
  Jiayi Wei, Jiong Chen, Damien Rohmer, Pooran Memari, and Mathieu Desbrun.
  Computer Graphics Forum, 42(2), 2023. pdf

- *Point Pattern Synthesis using Gabor and Random Filters,*
  Xingchang Huang, Pooran Memari, Hans-Peter Seidel, Gurprit Singh.
  Computer Graphics Forum, Proceedings of Eurographics Symposium on Rendering (EGSR), 2022. pdf

- *Delaunay Painting: Perceptual image coloring from raster contours with gaps,*
  Amal Dev Parakkat, Pooran Memari, Marie-Paule Cani.
  Computer Graphics Forum, 2022. pdf

- *Structured Shape-Patterns from a Sketch: A Multi-Scale Approach,*
  Pauline Olivier, Pooran Memari, Marie-Paule Cani.
  Proceedings of Graphics Interface 2022. pdf

- *Authoring Consistent Landscapes with Flora and Fauna,*
  Pierre Ecormier-Nocca, Guillaume Cordonnier, Philippe Carrez, Anne-Marie Moigne,
  Pooran Memari, Bedrich Benes, Marie-Paule Cani.
  ACM Transactions on Graphics (Proceedings of SIGGRAPH), 2021. pdf

- *Pair Correlation Functions with Free-Form Boundaries for Distribution Inpainting and Decomposition,*
  Baptiste Nicolet, Pierre Ecormier-Nocca, Pooran Memari, Marie-Paule Cani.
  Proceedings of Eurographics (short paper), 2020. pdf

- *Provably Consistent Distributed Delaunay Triangulation,*
  Mathieu Brédif, Laurent Caraffa, Murat Yirci, Pooran Memari.
  ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 2020.
  https://hal.archives-ouvertes.fr/hal-02551509

- *Tile & Merge: Distributed Delaunay Triangulations for Cloud Computing,*
  Laurent Caraffa, Mathieu Brédif, Murat Yirci, Pooran Memari.
  IEEE BigData (short paper), 2019.
  https://hal.archives-ouvertes.fr/hal-02535021

- *Connectivity-preserving Smooth Surface Filling with Sharp Features,*
  Thibault Lescoat, Pooran Memari, Jean-Marc Thiery, Maks Ovsjanikov, Tamy Boubekeur.
  Proceedings of Pacific Graphics (short paper), 2019.
  https://perso.telecom-paristech.fr/boubek/papers/InMeshing/InMeshing.pdf

- *Image-based Authoring of Herd Animations,*
  Pierre Ecormier-Nocca, Julien Pettré, Pooran Memari, Marie-Paule Cani.
  Computer Animation and Virtual Worlds, Wiley, In press, pp.1-11, 2019.
  https://hal.inria.fr/hal-02127824/document

- *Accurate synthesis of multi-class disk distributions,*
  Pierre Ecormier-Nocca, Pooran Memari, James Gain, Marie-Paule Cani.
  Computer Graphics Forum, Wiley, 2019, 38 (2), Proceedings of Eurographics, 2019.
  https://hal.inria.fr/hal-02064699/document

- *Layered reconstruction of stippling art,*
  Amal Dev Parakkat, Pooran Memari, Marie-Paule Cani.
  ACM SIGGRAPH 2019 Poster.
  https://hal.inria.fr/hal-02193269/document

- *Mean value coordinates for quad cages in 3D,*
  Jean-Marc Thiery, Pooran Memari, Tamy Boubekeur.
  ACM Transactions on Graphics (Proceedings of SIGGRAPH Asia), 2018.
  https://perso.telecom-paristech.fr/boubek/papers/QMVC/

- *A survey on data-driven dictionary-based methods for 3D modeling,*
  Thibault Lescoat, Maks Ovsjanikov, Pooran Memari, Jean-Marc Thiery, Tamy Boubekeur.
  Computer Graphics Forum, Vol. 37, No. 2, pp. 577-601, (Eurographics STARs), 2018.
  https://hal.archives-ouvertes.fr/hal-02953318/document

- *Generalized Barycentric Coordinates in Computer Graphics and Computational Mechanics,*
  Chapter 9: Generalized triangulations, Pooran Memari.
  Editors: Kai Hormann, N. Sukumar, CRC Press/Taylor & Francis Group, Pages 147-156, 2017.
  https://doi.org/10.1201/9781315153452

- *Conformal Factor Persistence for Fast Hierarchical Cone Extraction,*
  Ana Vintescu, Florent Dupont, Guillaume Lavoué, Pooran Memari, Julien Tierny.
  Proceedings of Eurographics 2017 short papers.
  https://hal.archives-ouvertes.fr/hal-01508966/file/vintescu_eg17.pdf

- *Least Squares Affine Transitions for Global Parameterization,*
  Ana Vintescu, Florent Dupont, Guillaume Lavoué, Pooran Memari, Julien Tierny.
  Proceedings of 25th International Conference in Central Europe on Computer Graphics,
  Visualization and Computer Vision 2017.
  https://hal.archives-ouvertes.fr/hal-01547522/document

- *Weighted triangulations for geometry processing,*
  Fernando de Goes, Pooran Memari, Patrick Mullen, Mathieu Desbrun.
  ACM Transactions on Graphics (TOG) 33.3 (2014): 28. (Presented at SIGGRAPH), 2014.
  http://geometry.caltech.edu/pubs/dGMMD14.pdf

- *Geometric Tomography with Topological Guarantees,*
  Omid Amini, Jean-Daniel Boissonnat, Pooran Memari.
  Journal: Discrete & Computational Geometry, 50.4 (2013): Pages 821-856, Springer.
  https://arxiv.org/pdf/1007.2452.pdf

- *Geometric Aspects of the Space of Triangulations,*
  Pooran Memari.
  Actes des rencontres du CIRM, 3 no. 1: Courbure discrète : théorie et applications (2013),
  Pages 141-150, 2013.
  https://acirm.centre-mersenne.org/item/10.5802/acirm.63.pdf

- *Hodge-optimized triangulations,*
  Patrick Mullen, Pooran Memari, Fernando de Goes, Mathieu Desbrun.
  ACM Transactions on Graphics (TOG), volume 30, Pages 103-114. ACM, (Proceedings of SIGGRAPH), 2011.
  http://geometry.caltech.edu/pubs/MMdGD11.pdf

- *Parameterization of Generalized Primal-Dual Triangulations,*
  Pooran Memari, Patrick Mullen, Mathieu Desbrun.
  Proceedings of International Meshing Roundtable, 2011.
  http://www.geometry.caltech.edu/pubs/MMD11.pdf

- PhD Thesis *Geometric Tomography With Topological Guarantees,*
  Pooran Memari.
  INRIA Sophia-Antipolis, University of Nice-Sophia Antipolis, 2010.
  https://dblp.org/rec/phd/hal/Memari10.html

- *Provably Good 2D Shape Reconstruction from Unorganized Cross Sections,*
  Pooran Memari, Jean-Daniel Boissonnat.
  Computer Graphics Forum, Vol.27, No. 5, Pages 1403-1410, 2008.
  Proceedings of Symposium on Geometry Processing (SGP), 2008.
  https://onlinelibrary.wiley.com/doi/epdf/10.1111/j.1467-8659.2008.01280.x

- *Shape Reconstruction From Unorganized Cross Sections,*
  Jean-Daniel Boissonnat, Pooran Memari.
  Computer Graphics Forum, Proceedings of Symposium on Geometry Processing (SGP), 2007.
  http://diglib.eg.org/handle/10.2312/SGP.SGP07.089-098