

Curriculum Vitae

1. Personal Details

Name: Alexandru-Cristian Telea
Titles: prof. dr. ir.
Date of birth: 16 July 1972
Work address: Department of Information and Computing Science, Utrecht University,
Princetonplein 5, 3584 CC Utrecht, the Netherlands
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<https://webspace.science.uu.nl/~telea001> (home page)
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2. Professional Experience

2019-present: **Full professor** in Visual Data Analytics, head of Visualization and Graphics research group, Dept. of Information and Computing Sciences, Utrecht University

2007-2019: **Full professor** in Multiscale Visual Analytics, Bernoulli Institute, University of Groningen, Netherlands; since 2019: part-time affiliated

2015-2017: **Visiting research professor**, Univ. Catholique Louvain (UCL), Belgium

2007-2008: **Visiting research professor**, LaBRI, University of Bordeaux, France

2000-2007: **Assistant professor** in Visualization, Dept. of Mathematics and Computer Science Eindhoven University of Technology, Netherlands

1996-2000: **PhD degree**, Eindhoven University of Technology, Netherlands (26/10/2000)

1992-1996: **MSc degree**, Dept. of Engineering Sciences, Polytechnic Univ. of Bucharest, Romania (10/09/1996), with honors

3. Research projects: Selection of significant grants acquired as principal (P) or co-applicant (C)

P: ICPIT Collaboration on Talents Cultivation (2024-2026, over 800K EUR), China Scholarship Council
C: VR for Visual Rehabilitation (2024-2029, 2.9M EUR), NWO/Dutch National Research Agency
P: ICPIT Collaboration on Talents Cultivation (2022-2024, over 800K EUR), China Scholarship Council
C: Next Move in Motion Disorders (2019-2024, 650K EUR), NWO/Dutch National Research Agency
C: Marie-Curie Sklodowska COFUND action (2018-2021, 1.25M EUR), EU H2020
P: Joint PhD collaborations Netherlands-Brazil (2013-present, over 1.5M EUR), CAPES/NUFFIC/FAPESP
C: Remote Control Tower (2016-2018, 1M EUR), EU H2020 SESAR
P: i-VIRNA: Intelligent Video-based robotic navigation (2011-2015, 300K EUR), Lely Technologies
P: 3D Skeletal Shape Processing (2010-2014, 200K EUR), Philips Research Netherlands

4. Thesis Supervision: Main supervisor for 39 PhD students (2007-present), 29 completed defenses. Details available online at <https://webspace.science.uu.nl/~telea001/Students>

5. Selected Activities: IEEE SoftVis (steering chair 2009-2014); 3DOR co-chair (2018); EuroVis co-chair (2016); EGPGV co-chair (2016, 2017); IEEE VISSOFT general chair (2021, 2013). SIBGRAPI co-chair (2024).

Keynote/capstone presentations at SIBGRAPI 2024, EuroVis 2023, VISSOFT 2023, VISIGRAPP 2023, SweDS 2021, LDAV 2021, VINCI 2021, Graph Drawing 2018, WSCG 2017.

Program committee member for IEEE Vis/InfoVis/VAST/EuroVis (2004-present).

6. Scientific Awards:

- Honorable mention paper award, EuroVis 2024
- Best student paper award, IVAPP 2024
- Best short paper award, EuroVis 2023
- Best paper award, EuroVA 2023
- Best paper and best student paper awards, Intl. Conf. Information Visualization Applications (IVAPP) 2022
- Best paper award, Intl. Conf. Information Visualization Applications (IVAPP) 2021
- Best paper award, Symp. Computer Networks and Distributed Systems (CoURB workshop) 2020
- Best paper award, Intl. Symp. on Bioimaging (BIOIMAGING) 2020
- Best paper award, Intl. Conf. Information Visualization Applications (IVAPP) 2020
- Best paper award, Intl. Conf. on Software Visualization (IEEE VIS/ISOFT) 2018
- Best poster award, Eurographics Conference on Visualization (EuroVis) 2017
- Best reviewer award, IEEE TVCG 2017
- Honorable mention paper award, EuroVis Short papers 2016
- Best student paper award, Computer Graphics and Visual Computing (Eurographics CGVC) 2015
- Honorable mention paper award, IEEE PacificVis, 2013
- Best paper award, Theory and Practice of Computer Graphics Conference (Eurographics TPCG), 2012
- Best application paper award, Theory and Practice of Computer Graphics Conference (Eurographics TPCG), 2012

7. Publications:

Over 360 publications (journals, books, book chapters, conferences, workshops, and posters/national conferences), listed below in inverse publication date. Full texts: <http://www.staff.science.uu.nl/~telea001/PAPERS>

Google Scholar (04/2025): **h-index: 52**; **i10-index: 174**; citations: 12227
<https://scholar.google.com/citations?user=VspO6ZUAAAAJ&hl=en&oi=ao>

7.1. Journals

1. Y. Zhang, S. Long, Y. Xu, X. Wang, C. Yao, J. Kosinka, S. Frey, A. Telea, X. Ban (2024) Multiphase Viscoelastic Non-Newtonian Fluid Simulation. *Computers & Graphics* 43(4)
2. B. Benato, C. Grosu, A. Falcao, A. Telea (2024) Human-in-the-loop: Using classifier decision boundary maps to improve pseudo labels. *Computers & Graphics* 124
3. A. Machado, A. Telea, M. Behrisch (2024) Controlling the Scatterplot Shapes of 2D and 3D Multidimensional Projections. *Computers & Graphics* 124
4. M. Lourens, S. Trager, Y. Kim, A. Telea, J. Roerdink (2024) Supervised star, galaxy, and QSO classification with sharpened dimensionality reduction. *Astronomy & Astrophysics* 690(224)
5. J. Thijssen, Z. Tian, A. Telea (2024) Interactive Tools for Explaining Multidimensional Projections for High-Dimensional Tabular Data. *Computers & Graphics* 122
6. Y. Wang, KF Qiu, A. Telea, Z. Hou, T. Zhou, Y. Cai, Z. Ding, H. Yu, J. Deng (2024) Interpreting Mineral Deposit Genesis Classification with Decision Maps: A Case Study Using Pyrite Trace Elements. *American Mineralogist* 109, 2116-2126
7. A. Machado, M. Behrisch, A. Telea (2024) Exploring Classifiers with Differentiable Decision Boundary Maps. *Computer Graphics Forum* 43(3) (**honorable mention award**)
8. S. van Wageningen, T. Mchedlidze, A. Telea (2024) An Experimental Evaluation of Viewpoint-Based 3D Graph Drawing. *Computer Graphics Forum* 43(3)
9. X. Ye, X. Wang, Y. Xu, J. Kosinka, A. Telea, L. You, J. Zhang, J. Chang (2024) Monte Carlo Vortical Smoothed Particle Hydrodynamics for Simulating Turbulent Flows. *Computer Graphics Forum* 43(2)
10. A. Chatzimparmpas, R. Martins, A. Telea, A. Kerren (2024) DeforestVis: Behavior Analysis of Machine Learning Models with Surrogate Decision Stumps. *Computer Graphics Forum* 43(6)
11. A. Telea, A. Machado, Y. Wang (2024) Seeing is Learning in High Dimensions - How Dimensionality Reduction and Machine Learning can Help Each Other. *SN Computer Science* 5:279
12. B. Oral, P. Dragicevic, A. Telea, E. Dimara (2024) Decoupling Judgment and Decision Making: A Tale of Two Tails. *IEEE TVCG* 30(10) 6928-6940
13. X. Wang, Y. Xu, S. Liu, B. Ren, J. Kosinka, A. Telea, J. Wang, C. Song, J. Chang, C. Li, J. Zhang, X. Ban (2024) Physics-based fluid simulation in computer graphics: Survey, research trends, and challenges. *Computational Visual Media* 10 803-858
14. Y. Wang, A. Machado, A. Telea (2023) Quantitative and Qualitative Comparison of Decision Map Techniques for Explaining Classification

15. B. Benato, A. Telea, A. Falcao (2023) Measuring the quality of labeled projections of high-dimensional data. *Computers & Graphics* (116) 287-297
16. B. Benato, A. Telea, A. Falcao (2023) Deep Feature Annotation by Iterative Meta-Pseudo-Labeling on 2D Projection. *Pattern Recognition* 141
17. M. Espadoto, G. Appleby, A. Suh, D. Cashman, M. Li, C. Scheidegger, E. Anderson, R. Chang, A. Telea (2023) UnProjection: Leveraging Inverse-Projections for Visual Analytics of High-Dimensional Data. *IEEE TVCG* 29(2), 1559-1572
18. S. van den Elzen, G. Andrienko, N. Andrienko, B. Fisher, R. Martins, J. Peltonen, A. Telea, M. Verleysen (2023) The Flow of Trust: A Visualization Framework for Externalizing, Exploring and Explaining Trust in ML Applications. *IEEE CG&A* 43(2), 78-88
19. F. C. M. Rodrigues, N. Hirata, A. Telea. (2023) Visualizing High-Dimensional Functions with Dense Maps M. Espadoto, *SN Computer Science* 4:230
20. A. Oliveira, M. Espadoto, R. Hirata Jr, A. Telea (2023) Stability Analysis of Supervised Decision Boundary Maps. *SN Computer Science* 4:226
21. M. Espadoto, Y. Kim, S. C. Trager, J. Roerdink, A. Telea (2023) Stabilizing and Simplifying Sharpened Dimensionality Reduction using Deep Learning. *SN Computer Science* 4:244
22. J. Wang, D. da Silva, J. Kosinka, A. Telea, R. Hashimoto, J. Roerdink (2022) Interactive image manipulation using morphological trees and spline-based skeletons. *Computers & Graphics* (108), 61-73
23. H. Wang, Z. Li, A. Telea, J. Kosinka, Z. Wu (2022) USTNet: Unsupervised Shape-to-Shape Translation via Disentangled Representations. *Computer Graphics Forum* 41(7) 141-152
24. G. Appleby, M. Espadoto, R. Chen, S. Goree, A. Telea, E. Anderson, R. Chang (2022) HyperNP: Interactive Visual Exploration of Multidimensional Projection Hyperparameters. *Computer Graphics Forum* 41(3), 169-181
25. Y. Kim, A. Telea, S. Trager, J. Roerdink (2022) Visual Cluster Separation Using High-Dimensional Sharpened Dimensionality Reduction. *Information Visualization* 21(3), 197-219
26. A. van der Stouwe, I. Tuitert, I. Giotis, J. Calon, R. Gannamani, J. Dalenberg, S. van der Veen, M. Klammer, A. Telea, M. Tijssen (2021) The next move in movement disorders (NEMO): developing a computer aided classification tool for hyperkinetic movement disorders. *BMJ Open* (11)10
27. J. Wang, J. Kosinka, A. Telea (2021) Spline-Based Dense Medial Descriptors for Lossy Image Compression. *J. Imaging* 7(8), 153
28. T. Martins, N. Lago, E. Santana, A. Telea, F. Kon, H. de Souza (2021) Using bundling to visualize multivariate urban mobility structure patterns in the Sao Paulo Metropolitan Area. *J. Internet Services and Applications* 12(6)
29. J. Wang, J. Kosinka, A. Telea (2021) Spline-based medial axis transform representation of binary images. *Computers & Graphics* (98), 165-176
30. Z. Tian, X. Zhai, G. van Steenpaal, L. Yu, E. Dimara, M. Espadoto, A. Telea (2021) Quantitative and Qualitative Comparison of 2D and 3D Projection Techniques for High-Dimensional Data. *Information* (12), 239
31. A. Sobiecki, J. van Dijk, H. Folkertsma, A. Telea (2021) Does face restoration improve face verification? *Multimedia Tools and Applications* (80), 32863-32883
32. Z. Tian, X. Zhai, D. van Driel, G. van Steenpaal, M. Espadoto, A. Telea (2021) Using Multiple Attribute-Based Explanations of Multidimensional Projections to Explore High-Dimensional Data. *Computers & Graphics* (98), 93-104
33. E. Vernier, J. Comba, A. Telea (2021) Guided Stable Dynamic Projections. *Computer Graphics Forum* 40(3), 87-98
34. S. Liu, X. Wang, X. Ban, Y. Xu, J. Zhou, J. Kosinka, A. Telea (2021) Turbulent Details Simulation for SPH Fluids via Vorticity Refinement. *Computer Graphics Forum* 40(1), 54-67
35. S. Bouma, C. Hurter, A. Telea (2020) Structure-Aware Trail Bundling for Large DTI Datasets. *Algorithms* 13(12), 216-241
36. B. Benato, J. Gomes, A. Telea, A. Falcao (2020) Semi-Automatic Data Annotation guided by Feature Space Projection. *Pattern Recognition* 109, article 107612
37. S. Martins, A. Telea, A. Falcao (2020) Investigating the impact of supervoxel segmentation for unsupervised abnormal brain asymmetry detection. *Computerized Medical Imaging and Graphics* 85, article 101770
38. J. Wang, M. Terpstra, J. Kosinka, A. Telea (2020) Quantitative Evaluation of Dense Skeletons for Image Compression. *Information* 11(5), 274-290
39. Z. Wu, X. Chen, L. Yu, A. Telea, J. Kosinka (2020) Co-skeletons: Consistent Curve Skeletons for Shape Families. *Computers & Graphics* (90), 62-72
40. M. Lobo, A. Telea, C. Hurter (2020) Feature Driven Combination of Animated Vector Field Visualizations. *Computer Graphics Forum* 39(3), 429-441
41. E. Vernier, M. Sondag, J. Comba, B. Speckmann, A. Telea, K. Verbeek (2020) Quantitative Comparison of Time-Dependent Treemaps. *Computer Graphics Forum* 39(3), 393-404

42. E. Vernier, R. Garcia, I. da Silva, J. Comba, A. Telea (2020) Quantitative Evaluation of Time-Dependent Multidimensional Projection Techniques. *Computer Graphics Forum* 39(3), 241-252
43. M. Espadoto, N. Hirata, A. Telea (2020) Deep Learning Multidimensional Projections. *Information Visualization* 9(3), 247-269
44. H. Schubert, A. Jalba, A. Telea (2020) Feature preserving noise removal for binary voxel volumes using 3D surface skeletons. *Computers and Graphics* 87, pp. 32-40
45. M. Espadoto, R. Martins, A. Kerren, N. Hirata, A. Telea (2019) Towards a Quantitative Survey of Dimension Reduction Techniques. *IEEE TVCG*, doi:10.1109/TVCG.2019.2944182
46. P. Arico, M. Reynal, G. Di Fiumeri, G. Borghini, N. Sciaraffa, J. Imbert, C. Hurter, M. Terenzi, A. Ferreira, S. Pozzi, V. Betti, M. Marucci, A. Telea, F. Babiloni (2019) How neurophysiological measures can be used to enhance the evaluation of remote tower solutions. *Front. Hum. Neurosci* 13(303)
47. F. Rodrigues, M. Espadoto, R. Hirata, A. Telea (2019) Constructing and Visualizing High-Quality Classifier Decision Boundary Maps. *Information* 10(9), 280-297, MDPI
48. W. Zeng, Q. Shen, Y. Jiang, A. Telea (2019) Route-Aware Edge Bundling for Visualizing Origin-Destination Trails in Urban Traffic. *Computer Graphics Forum* 38(3), 263-275
49. L. Pagliosa, A. Telea (2019) RadViz++: Improvements on Radial-Based Visualizations. *Informatics* 6(16), 1-23, MDPI
50. R. Garcia, A. Telea, B. da Silva, J. Torresen, J. Comba (2018) A Task-and-Technique Centered Survey on Visual Analytics for Deep Learning Model Engineering. *Computers and Graphics* (77), 30-49
51. M. Traoré, C. Hurter, A. Telea (2018) Interactive obstruction-free lensing for volumetric data visualization, *IEEE TVCG*, 25(1), 1029-1039
52. J. A. M. Flores, L. Linsen, A. Telea (2018) Skeleton-based Scagnostics, *IEEE TVCG* 24(1), 542-552
53. C. Hurter, S. Puechmorel, F. Nicol, A. Telea (2018) Functional Decomposition for Bundled Simplification of Trail Sets, *IEEE TVCG* 24(1), 500-510
54. J. F. Kruiger, A. Hassoumi, H. J. Schulz, A. Telea, C. Hurter (2017) Multidimensional Data Exploration by Explicitly Controlled Animation, *Informatics* 4(26), 342-457
55. A. Lhuillier, C. Hurter, A. Telea (2017) State of the Art in Edge and Trail Bundling Techniques, *Computer Graphics Forum* 36(3), 619-645
56. P. Rauber, S. Fadel, A. Falcao, A. Telea (2017) Visualizing the Hidden Activity of Artificial Neural Networks, *IEEE TVCG* 23(1), 101-110
57. P. Rauber, A. Falcao, A. Telea (2017) Projections as Visual Aids for Classification System Design, *Information Visualization* 17(4), 282-305
58. A. Tagliasacchi, T. Delame, M. Spagnuolo, N. Amenta, A. Telea (2016) 3D Skeletons: A State-of-the-Art Report, *Computer Graphics Forum* 35(2), 573-597
59. A. Jalba, A. Sobiecki, A. Telea (2016) An unified multiscale framework for planar, surface, and curve skeletonization, *IEEE TPAMI* 38(1), 30-45
60. R. da Silva, P. Rauber, A. Telea (2016) Beyond the Third Dimension: Visualizing High-Dimensional Data with Projections, *IEEE Computing in Science & Engineering* 18(5), 98-107
61. C. Feng, A. Jalba, A. Telea (2016) Improved Part-Based Segmentation of Voxel Shapes by Skeleton Cut Spaces, *Mathematical Morphology-Theory and Applications* 1(1), 60-78
62. J. Koehoorn, A. Sobiecki, P. Rauber, A. Jalba, A. Telea (2016) Efficient and Effective Automated Digital Hair Removal from Dermoscopy Images, *Mathematical Morphology-Theory and Applications* 1(1), 14-29
63. M. van der Zwan, V. Codreanu, A. Telea (2016) CUBu: Universal real-time bundling for large graphs, *IEEE TVCG* 22(12), 2550-2563
64. D. Coimbra, R. Martins, T. Neves, A. Telea, F. Paulovich (2015) Explaining three-dimensional dimensionality reduction plots, *J. Information Visualization*, 15(2), 154-172
65. J. Kustra, A. Jalba, A. Telea (2015) Computing refined skeletal features from medial point clouds, *Pattern Recognition Letters*, 76, 13-21
66. R. Martins, D. Coimbra, R. Minghim, A. Telea (2014) Visual Analysis of Dimensionality Reduction Parameter Space, *Computers & Graphics*, 41, Elsevier, 26-42
67. B. Liu, A. Telea, J. Roerdink, G. Clapworthy, D. Williams, P. Yang, F. Dong, V. Codreanu, A. Chiarini (2014) Parallel centerline extraction on the GPU. *Computers & Graphics* 41, 72-83
68. A. Sobiecki, A. Jalba, A. Telea (2014) Comparison of curve and surface skeletonization methods for voxel shapes. *Pattern Recognition Letters* 47, 147-156
69. C. Hurter, S. Conversy, D. Gianazza, A. Telea (2014) Aircraft trajectory analysis with interactive image-based information visualization techniques, *Transportation Research C* 27(2), Pergamon, 207-227
70. D. Reniers, L. Voinea, O. Ersoy, A. Telea (2014), The Solid* Toolset for Software Visual Analytics of Program Structure and Metrics Comprehension: From Research Prototype to Product, *Science of Computer Programming* (79), Elsevier, 229-240
71. B. Broeksema, A. Telea, T. Baudel (2013) Visual Analysis of Multi-Dimensional Categorical Data Sets, *CGF* 32(8), 158-169
72. B. Broeksema, T. Baudel, A. Telea, P. Crisafulli (2013) Decision Exploration Lab: A Visual Analytics Solution for Decision Management, *IEEE TVCG* 19(12), 1972-1981
73. J. Kustra, A. Jalba, A. Telea (2013) Robust Segmentation of Multiple Intersecting Manifolds from Unoriented Noisy Point Clouds, *CGF* 33(1), 73-87
74. C. Hurter, O. Ersoy, S. Fabrikant, T. Klein, A. Telea (2013) Bundled Visualization of Dynamic Graph and Trail Data, *IEEE TVCG* 20(8), 1141-1157
75. A. Jalba, J. Kustra, A. Telea (2013) Surface and Curve Skeletonization of Large 3D Models on the GPU, *IEEE TPAMI* 35(6), 1495-508
76. C. Hurter, O. Ersoy, A. Telea (2012) Graph Bundling by Kernel Density Estimation, *CGF* 31(3), 865-874
77. C. Hurter, O. Ersoy, A. Telea (2011) MoleView: An Attribute and Structure-based Semantic Lens for Large Element-based Plots, *IEEE TVCG*

78. O. Ersoy, C. Hurter, F. Paulovich, G. Cantareira, A. Telea (2011) Skeleton-based edge bundling for graph visualization, *IEEE TVCG* 17(12), 2364-2373
79. A. Telea, O. Ersoy (2010) Image-Based Edge Bundles: Simplified Visualization of Large Graphs, *CGF* 29(3), **2nd best paper award (EuroVis'10)**
80. A. Telea, L. Voinea, H. Sassenburg (2010), Visual Tools for Software Architecture Understanding: A Stakeholder Perspective, *IEEE Software* 27(6), 46-53
81. A. Telea, L. Voinea (2010) Visual Software Analytics for the Build Optimization of Large-Scale Software Systems, *Computational Statistics*, Elsevier, DOI: 10.1007/s00180-011-0248-2
82. A. Telea, H. Byelas, L. Voinea (2009) A Framework for Reverse Engineering Large C++ Code Bases, *Electronic Notes in Theoretical Computer Science*, no. 233, 143-159
83. L. Voinea, A. Telea (2009) Visual Querying and Analysis of Large Software Repositories, *Empirical Software Engineering*, 14(3), 316-340
84. D. Reniers, A. Telea (2009) Extreme Simplification and Rendering of Point Sets Using Algebraic Multigrid, *Computing and Visualization in Science*, 12(1), Springer, 9-23
85. A. Telea, H. Byelas, L. Voinea (2008) Architecting an Open System for Querying Large C and C++ Code Bases, *SACJ*, no. 41, 46-60
86. D. Reniers, A. Telea (2008) Part-type Segmentation of Articulated Voxel-Shapes using the Junction Rule, *CGF* 27(7), 1845-1852
87. D. Reniers, A. Telea (2008) Patch-type Segmentation of Voxel Shapes using Simplified Surface Skeletons, *CGF* 27(7), 1837-1844
88. H. Byelas, A. Telea (2008) Visual Software Analytics for Assessing the Maintainability of Object-Oriented Software System, *J. of Information, Interaction, and Intelligence*, 8(1), 46-60
89. D. Reniers, A. Telea (2008) Hierarchical Part-type Segmentation using Voxel-based Curve Skeletons, *Visual Computer*, 24(6), 383-395
90. H. Byelas, A. Telea (2008) Towards Realism in Drawing Areas of Interest on Architecture Diagrams, *JVLC*, 20(2), 110-128
91. A. Telea, D. Auber (2008) Code Flows: Visualizing Structural Evolution in Source Code, *CGF* 27(3), 831-839
92. T. Preusser, M. Droske, C. Garbe, A. Telea, M. Rumpf (2007) A Variational Approach to Joint Denoising, Edge Detection, and Motion Estimation in Image Sequence Processing, *SIAM Journal of Applied Math.* 68(3), 599-618
93. D. Reniers, J. J. van Wijk, A. Telea (2008) Computing Multiscale Curve and Surface Skeletons of Genus 0 Shapes using a Global Importance Measure, *TVCG* 14(2), 355-368
94. L. Voinea, J. J. Lukkien, A. Telea (2007) Visual Assessment of Software Evolution, *Science of Computer Programming*, 65(3), 222-248
95. L. Voinea, A. Telea (2006) Visual Data Mining and Analysis of Software Repositories, *Computers & Graphics*, 31(3), Elsevier, 410-428
96. D. Parsons, A. Rashid, A. Telea, A. Speck (2006) An Architectural Pattern for Designing Component-Based Application Frameworks, *Software: Practice & Experience*, J. Wiley & Sons, 36(2), 2006, 157-190
97. J. Maubach, A. Telea (2005) The NumLab Numerical Laboratory for Computation and Visualisation, *Computing and Visualisation in Science*, 6(8), Springer, 1-17
98. U. Clarenz, M. Rumpf, A. Telea (2004) Surface Processing Methods for Point Sets using Finite Elements, *Computers & Graphics*, 28(6), Elsevier, 851-868
99. U. Clarenz, M. Rumpf, A. Telea (2004) Robust Feature Detection and Local Classification for Surfaces based on Moment Analysis, *IEEE TVCG* 10(5), 516-524
100. U. Clarenz, M. Griebel, M. Rumpf, M.A. Schweitzer, A. Telea (2004) Feature Sensitive Multiscale Editing on Surfaces, *The Visual Computer*, 20(5), Springer, 329-343
101. A. Telea (2004) An Image Inpainting Technique Based on the Fast Marching Method, *Journal of Graphics Tools*, 9(1), ACM, 25-36
102. H. Garcke, T. Preusser, M. Rumpf, A. Telea, U. Weikard, J.J. van Wijk (2001) A Phase Field Model for Continuous Clustering on Vector Fields, *IEEE TVCG*, 230-241
103. K. Laevsky, A. Telea, R.M.M. Mattheij (2001) An Interactive Visualisation Tool Applied to the Simulation of Glass Pressing, *Computing and Visualization in Science*, 4(1), Springer, 31-40
104. M.J. Noot, A. Telea, J.K.M. Jansen, R.M.M. Mattheij (1998) Real-Time Numerical Simulation and Visualization of Electrochemical Drilling, *Computing and Visualization in Science*, 1(2), Springer, 105-111
105. A. Telea, C.W.A.M. van Overveld (1998) The Close Objects Buffer: A Sharp Shadow Detection Technique for Radiosity Methods, *Journal of Graphics Tools*, 2(2), ACM, 1-8

7.2. Books and editorships

1. Proceedings of the 37th Conference on Graphics, Patterns, and Images (SIBGRAPI 2024), IEEE, eds. A. Telea C. M. Dal Sasso Freitas, J. Almeida, N. Sebe
2. Foreword to AniNex Workshop 2022 J. Chang, X. Wang, A. Telea, J. Kosinka, F. Tian, X. Ban, J. Zhang (eds.) *Computers & Graphics*
3. Special issue on Computer Graphics Theory, Information Visualization Theory and Applications. J. Braz, D. Bechmann, L. Linsen, A. Telea, A. Claudio (eds.) *Graphical Models*
4. Proceedings of the 9th IEEE Working Conference on Software Visualization (VISSOFT). L. Merino, J. P. Sandoval Alcocer, A. Telea (eds.), IEEE, 2021
5. Special Issue: Graph Drawing and Information Visualization. A. Telea, D. Auber (eds.) *Algorithms* (13), 2021
6. Computer Vision, Imaging and Computer Graphics - Theory and Applications (Revised Selected Papers from VISIGRAPP 2018) D. Bechmann, M. Chesa, A. P. Claudio, F. Imai, A. Kerren, P. Richard, A. Telea, A. Tremeau (eds.), Springer, 2019

7. Computer Vision, Imaging and Computer Graphics - Theory and Applications (Revised Selected Papers from VISIGRAPP 2017) A. Claudio, D. Bechmann, P. Richard, T. Yamaguchi, L. Linsen, A. Telea, F. Imai, A. Tremeau (eds.), Springer, 2019
8. Special issue on selected papers from IVAPP 2018 (eds. A. Telea, A. Kerren), *Informatics* 9(7), MDPI, 2018
9. Advances in Computer Graphics & Computer Vision (IVAPP'18 selected papers), eds. A. Telea, A. Kerren, to appear. Springer, 2018
10. Proc. 11th EG Workshop on 3D Object Retrieval (3DOR), eds. R. Veltkamp, T. Theoharis, A. Telea. Eurographics, 2018
11. Proc. Eurographics Tutorials, eds. T. Rischel, A. Telea. Eurographics, 2018
12. Special issue on Visual Analytics in Software Engineering (eds. M. Staron, H. Sahraoui, A. Telea), *Information and Software Technology* 98 (117), Elsevier, 2018
13. Proc. 13th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications, vol. 3: IVAPP (eds. A. Telea, A. Kerren, J. Braz). SCITEPRESS 2018
14. Computer Vision, Imaging and Computer Graphics Theory and Applications - VISIGRAPP 2016 Revised Selected Papers (eds. J. Braz, N. Magnenat-Thalmann, P. Richard, L. Linsen, A. Telea, S. Battiato, F. Imai). Springer, 2017
15. Proc. EG Symposium on Parallel Graphics and Visualization (EGPGV), eds. J. Bennett, A. Telea. Eurographics (2017)
16. Proc. 12th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISIGRAPP'17), eds. J. Braz, A. Claudio, D. Bechmann, P. Richard, T. Yamaguchi, L. Linsen, A. Telea, F. Imai, A. Tremeau. SCITEPRESS, 2017
17. Proc. 11th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications (VISIGRAPP'16), eds. J. Braz, N. Magnenat-Thalmann, P. Richard, L. Linsen, A. Telea, S. Battiato, F. Imai. SCITEPRESS, 2016
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2. L. Borodaev, R. Groenboom, R. Smedinga, A. Telea (2018) Software metrics for policy-driven SDLC automation. Proc. NEXTA, 90-99
3. T. Delame, J. Kustra, A. Telea (2016) Structuring 3D Medial Skeletons: A Comparative Study, Proc. Vision, Modeling, and Visualization (VMV), Eurographics, 85-94
4. R. da Silva, E. Vernier, P. Rauber, J. Comba, R. Minghim, A. Telea (2016) Metric Evolution Maps: Multidimensional Attribute-driven Exploration of Software Repositories, Proc. Vision, Modeling, and Visualization (VMV), Eurographics, 62-71
5. C. Feng, A. Jalba, A. Telea (2016) A descriptor for voxel shapes based on the skeleton cut space Proc. 3D Object Retrieval (3DOR), Eurographics, 102-111
6. C. Hurter, A. Taylor, S. Carpendale, A. Telea (2014) Interactive exploration and selection in volumetric datasets with color tunneling, Proc. UIST – adjunct publications, 64-67
7. B. Broeksema, A. Telea (2011) Visual Support for Porting Large Code Bases, Proc. IEEE VISSOFT, 92-101
8. D. Reniers, L. Voinea, A. Telea (2011) Visual exploration of program structure, dependencies and metrics with SolidSX, Proc. IEEE VISSOFT, 67-70
9. D. Reniers, L. Voinea, O. Ersoy, A. Telea (2010) A visual analytics toolset for program structure, metrics, and evolution comprehension, Proc. IEEE WasDeTT, 2010, 34-48
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11. A. Gonzalez, R. Theron, A. Telea, F. Garcia (2009), The Visualization of the Evolution of Software Project Structures and Metrics, Proc. IEEE IWPSE, 78-84
12. L. Voinea, A. Telea (2009) Case Study: Visual Analytics in Software Product Assessments, Proc. IEEE VISSOFT, 102-111
13. M. Sensalire, P. Ogao, A. Telea (2009) Evaluation of Software Visualization Tools: Lessons Learned, Proc. IEEE VISSOFT, 67-74
14. D. Reniers, A. Jalba, A. Telea (2008) Robust Classification and Analysis of Anatomical Surfaces Using 3D Skeletons, Proc. EG VCBM, 32-39
15. A. Telea, L. Voinea (2008) A Framework for Reverse Engineering Large C++ Code Bases, Proc. Software Quality and Maintainability, IEEE
16. A. Telea, L. Voinea (2008) Visual Analytics for Understanding the Evolution of Large Software Projects, Proc. BENEVOL, 24-27
17. F. Chevalier, D. Auber, A. Telea (2007) Structural Analysis and Visualization of C++ Code Evolution using Syntax Trees, Proc. IWPSE, 90-97
18. V. Valeanu, A. Telea, A. Vizitiu, M. Marin, P. de Hillerin, V. Vasiliu, C. Costache (2007) Online Assessment and Warning for Vital Parameters Abnormal Evolution, Proc. MedInf'07
19. S. Moreta, A. Telea (2007) Visualizing Dynamic Memory Allocations, Proc. VISSOFT, IEEE, 31-38
20. L. Voinea, A. Telea (2007) Visualizing Debugging Activity in Source Code Repositories, Proc. VISSOFT, IEEE, 156-157
21. M. Termeer, J. Oliván Bescos, A. Telea (2006) Preserving Sharp Edges with Volume Clipping, Proc. VMV, 341-348
22. L. Voinea, A. Telea (2006a) An Open Framework for CVS Repository Querying, Analysis and Visualization, Proc. ACM MSR, 33-39
23. L. Voinea, A. Telea (2006b) Mining Software Repositories with CVSgrab, Proc. ACM Mining Software Repositories, 167-169 – **Second prize MSR'06 Challenge**
24. A. Telea, L. Voinea (2005) Interactive Visual Mechanisms for Exploring Source Code Evolution, Proc. IEEE VISSOFT, 52-57
25. M. Termeer, C. Lange, A. Telea, M. Chaudron (2005) Visual Exploration of Combined Architectural and Metric Information, Proc. IEEE VISSOFT, 21-26
26. L. Voinea, A. Telea (2005) CVSscan: Visualization of Software Evolution, Proc. BENEVOL, TU/e Press, 101-109
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28. C. Sminchisescu, A. Telea (2001) A Framework for Generic State Estimation in Computer Vision Applications, Proc. ICVS, Springer, 21-34
29. A. Telea (1999) A Component-Based Dataflow Framework for Simulation and Visualization, Proc. WCOP, Springer, 187-197
30. M. A. Rashid, D. Parsons, A. Telea (1999) Workshop Report: The 9th Workshop for PhD Students in Object Oriented Systems, ECOOP '99 Workshop Reader, Springer, 116-135
31. A. Telea, C. Sminchisescu (1999) Combining OO and Dataflow Modelling in the VISSION Simulation System, Proc. 9th Intl. Workshop of PhD Students in Object-Oriented Systems (PhDOOS), TU/e Press, 136-143
32. C. Sminchisescu, A. Telea (1999) An Object-Oriented Approach to Compiler Technology, Proc. PhDOOS, TU/e Press, 73-79

7.6. Posters and national refereed conferences

1. S. van Wageningen, T. Mchedlidze, A. Telea (2023) Beyond Planarity: A Spring-Based Approach. Proc. Graph Drawing
 2. E. Vernier, J. Comba, A. Telea (2017) Quantitative Comparison of Treemap Techniques for Time-Dependent Hierarchies, Proc. EuroVis – posters. **Best poster award**
 3. J. Kruiger, A. Telea, C. Hurter (2017) Projection Navigation In Extremely Large Datasets (PNIELD), Proc. EuroVis – posters
 4. H. Kruiger, A. Telea (2017) Using t-SNE for graph drawing, Proc. ICT-OPEN
 5. A. Sobiecki, J. Koehoorn, D. Boda, C. Solovan, A. Diaconeasa, A. Jalba, A. Telea (2015) A New Efficient Method for Digital Hair Removal by Dense Threshold Analysis, Proc. 4th World Congress of Dermoscopy, extended abstract and poster
 6. D. Boda, A. Diaconeasa, S. Zurac, A. Telea, M. Neagu, C. Constantin, C. Solovan, R. Voinescu (2012) Automatic Segmentation of Skin Lesions Using Multiscale Skeletons, Proc. 8th EADO Congress, 2012, extended abstract and poster
 7. M. van der Zwan, A. Telea (2013) Teat Detection - Low Resolution Robust Shape Tracking, Proc. ICT-OPEN, poster
 8. A. Sobiecki, A. Jalba, A. Telea (2013) Qualitative and Quantitative Comparison of Curve and Surface Skeletons - A State of the Art Review, Proc. ICT-OPEN, poster
 9. B. Broeksema, A. Telea (2011) PortAssist: Visual Analysis for Porting Large Code Bases, IEEE VisWeek poster & extended abstract
 10. C. Hurter, O. Ersoy, A. Telea (2011) Generalizing Semantic Lenses for Large Element-based Plots, Proc. ASCI/IPA/SIKS
 11. O. Ersoy, A. Telea (2011) Graph Edge Bundling by Medial Axes, Proc. ASCI/IPA/SIKS
 12. D. Reniers, A. Telea, L. Voinea (2010) SolidSX: A Visual Analysis Tool for Software Maintenance, Proc. EuroVis'10 – poster
 13. O. Ersoy, A. Telea (2010) Bundle-Centric Visualization of Compound Digraphs, Proc. ASCI, 235-242
 14. H. Byelas, A. Telea (2009) Texture-Based Metrics Visualization on Software Architecture Diagrams, Proc. ASCI, 122-129
 15. H. Byelas, A. Telea (2008). Evaluating Visual Realism in Drawing Areas of Interest on UML Diagrams, Proc ASCI, 237-245
 16. H. Byelas, A. Telea (2007) Visualization of Quality Attributes on Software Architectures, SIREN'07, Delft – poster
 17. D. Reniers, A. Telea (2006) Tolerance-based feature transforms: A quantitative comparison, Proc. ASCI, 192-200
 18. L. Voinea, A. Telea (2006) A File-Based Visualization of Software Evolution, Proc. ASCI, ASCI Press, 114-121
 19. D. Reniers, A. Telea (2005) Quantitative Comparison of Complete Distance Transforms for Skeletons, SIREN'05, Eindhoven – poster
 20. L. Voinea, A. Telea, J. J. van Wijk (2005) Software Evolution Visualization, SIREN'05, Eindhoven, Netherlands – poster
 21. D. Reniers, A. Telea (2005) Extreme Simplification and Rendering of Point Sets using Algebraic Multigrid, Proc. ASCI, 232-239
 22. L. Voinea, A. Telea, J. J. van Wijk (2005) A Line-based visualization of code evolution, Proc. ASCI, 350-357
 23. A. Telea, J. J. van Wijk (1999) Simulation and Visualization in the VISSION Object-Oriented Dataflow System, Proc. ASCI, 435-442
 24. A. Telea (1998) A Scientific Visualization and Computational Steering Environment, 1st Mech. Eng. Symp., Netherlands – poster
 25. A. Telea (1999) VISSION: An Interactive Scientific Simulation and Visualization Environment, 2nd Mech. Eng. Symp., Netherlands – poster
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