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SECTION 5 – PUBLICATIONS

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SECTION 5 – PUBLICATIONS

5.1. OVERVIEW & HIGHLIGHTS

My publications are distributed in two categories of journals and conference venues: (1) Interactive Visual Computing (IVC) – i.e, Interactive Computer Graphics, Visualization and Visual Analytics – and (2) in IVC research applied to the disciplines of Geoscience & Petroleum Engineering (GPE).

Each of my publications (in both IVC and GPE categories) have components and topics from each of these 5 Research Themes (RT) of my program (Sec. 4) – i.e., (RT-1) Non-Photorealistic Rendering, (RT-2) Sketch-based Interfaces & Modeling, (RT-3) Visualization & Analytics, (RT-4) Modeling & Simulation, and (RT-5) Human-Data & Computer Interaction. However, each publication has one primary RT associated to it.

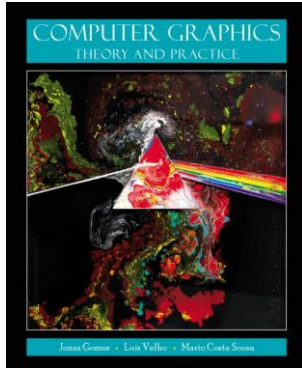
Refereeing Processes. In computer science/IVC journals, the refereeing process is basically the same as in journals in GPE. In computer science/IVC research is also broadly disseminated in peer-reviewed conference venues, where papers are submitted as full manuscripts (i.e., 6-10 pages, double-column) reporting new and original material on a range of topics in IVC. Each paper is peer-reviewed (like in journal submissions) prior to the technical program selection meeting. Computer Science/IVC conference papers can be conditionally accepted (i.e., requiring further content) and then re-submitted for a final round of reviews. In most GPE conference venues, papers are submitted as extended abstracts (EA) (e.g., 2-4 pages), reporting new and original material in a range of multi-disciplinary topics in GPE. Each extended abstract is reviewed by 2-4 referees prior to the technical program selection meeting. If accepted, authors are requested to submit a longer version of the extended abstract (e.g., 5-16 pages) for publication. Selected GPE conference papers can also be recommended for a subsequent peer-reviewed journal article submission, requiring at least 30% of additional content and material.

5.2 BOOKS

5.2.1 Full Text Books

I co-authored two textbooks in Computer Graphics with Drs. Jonas Gomes and Luiz Velho from the National Institute for Pure and Applied Mathematics (IMPA), Rio de Janeiro, Brazil.

1. Gomes *et al.* '12a



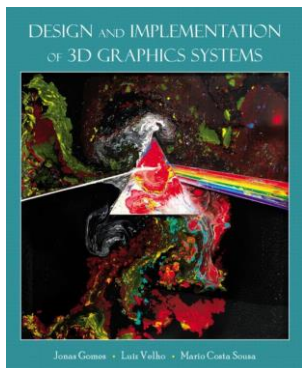
Gomes J, Velho L, **Costa Sousa M.** (2012a).
Computer Graphics: Theory and Practice.
 A K Peters / CRC Press

- Presents an abstraction paradigm for computational applied mathematics used to encapsulate problems in different areas of computer graphics
- Covers core topics such as the geometry of computer graphics, transformations, coordinate systems, the space of 3D rotations, color spaces, planar/spatial graphics objects, hierarchies, geometric modeling, image synthesis pipeline, illumination models, and mapping techniques
- Contains exercises at the end of each chapter

560 Pages

ISBN 9781568815800 - CAT# K00376 (Publisher's Link)

2. Gomes *et al.* '12b



Gomes J, Velho L, **Costa Sousa M.** (2012b).
Design and Implementation of 3D Graphics Systems.
 A K Peters / CRC Press

- Presents practical aspects of 3D computer graphics at an introductory level
- Focuses on fundamental algorithms and the implementation problems associated with them
- Explores the relationship between the various components of a graphics system
- Describes geometric modeling and image synthesis
- Enables readers to practice with the techniques

350 Pages

ISBN 9781466571211 - CAT# K16528 (Publisher's Link)

5.2.2 Book Chapters

1. Severn *et al.* '11

Severn A, Samavati F, Cherlin J*, **Costa Sousa M**, Jorge JA. (2011). **Sketch-Based Modeling and Assembling with Few Strokes.** Jorge JA, Samavati F. (Eds.) **Sketch-based Interfaces and Modeling.** 1: 255-286. Springer London.

- Domain: IVC
- Research Theme: RT-2
- Covers part of thesis rsrch. of HQP Cherlin (MSc)
- Supv: Costa Sousa / Samavati

5.3. PEER-REVIEWED JOURNALS

5.3.1. Journal Reference Entries

For each reference entry, the full citation is provided, with the following additional information:

- Highly Qualified Personnel (HQP) categories (Sec. 3): PhD, MSc, PDF (postdoc fellow), and VR (visiting researcher).
- Each HQP author is identified with an asterisk (*).
- Discipline Categories: IVC or GPE / primary Research Theme(s): RT-(1 to 5); e.g., “IVC / RT-2” means the manuscript is in the disciplines of “Interactive Visual Computing” with a primary Research Theme #2 “Sketch-based Interfaces & Modeling”.
- Context of the publication (i.e., related to thesis research, collaborative projects, supervisory roles)
- Links to the manuscript (DOI or PDF format), clickable from the CV’s PDF version.

5.3.1.1. 2009– 2018 (U. of Calgary)

2017 [3 entries]

1.	Hamdi et al. '17a	GPE / RT-4
	Hamdi H*, Couckuyt I, Costa Sousa M , Dhaene T. (2017a). Gaussian Processes for History-Matching: Application to an Unconventional Gas Reservoir. <i>Computational Geosciences</i> . 21(2): 267-287. 2017/04.	<ul style="list-style-type: none"> ➤ Rsrch of Hamdi (PDF) ➤ Supv: Costa Sousa ➤ DOI link
2.	Rocha et al. '17a	IVC / RT-3
	Rocha A*, Alim U, Silva JD*, Costa Sousa M . (2017a). Decal-Maps: Real-time Layering of Decals on Surfaces for Multivariate Visualization. <i>IEEE Transactions on Visualization and Computer Graphics</i> (TVCG). <i>SciVis 2016 Special Issue Paper</i> . 23(1): 821-830. 2017/01.	<ul style="list-style-type: none"> ➤ Thesis of Rocha (PhD) ➤ Supv: Costa Sousa / Alim ➤ Presented @ IEEE SciVis conference [Rocha et al. '16] ➤ DOI link
3.	Zhang et al. '17b	GPE / RT-4
	Zhang Z, Geiger S, Rood M, Jacquemyn C, Jackson MD, Hampson GJ, de Carvalho FM*, Machado Silva CC*, Silva JD*, Costa Sousa M . (2017b). A Tracing Algorithm for Flow Diagnostics on Fully Unstructured Grids with Multi-Point Flux Approximation. <i>SPE Journal</i> . (In Press)	<ul style="list-style-type: none"> ➤ RRM project (Sec. 4) ➤ Supv HQP (*): Costa Sousa ➤ Expan ver. of conference paper [Zhang et al. '17a]

2016 [1 entry]

1.	de Carvalho et al. '16	IVC / RT-3
	de Carvalho FM*, Vital Brazil E*, Marroquim RG, Costa Sousa M , Oliveira A. (2016). Interactive Cutaways of Oil Reservoirs. <i>Graphical Models</i> . 84(C): 1-14. 2016/03.	<ul style="list-style-type: none"> ➤ PhD rsrch. of de Carvalho (PDF) ➤ PhD Supv: Marroquim ➤ PDF Supv: Costa Sousa ➤ DOI link

2015 [5 entries]

1. Amorim E et al. '15	IVC / RT-3
Amorim E*, Vital Brazil E*, Costa Sousa M , Samavati F, Velho L, Nonato LG, Mena-Chalco J. (2015). Facing the High-Dimensions: Inverse Projection with Radial Basis Functions . <i>Computers & Graphics</i> . 48(C): 35-47. 2015/05.	<ul style="list-style-type: none"> ➤ Thesis of Amorim E (PhD) ➤ Supv: Costa Sousa / Samavati ➤ DOI link 10.1016/j.cag.2015.02.009 ➤
2. Hamdi et al. '15a	GPE / RT-4
Hamdi H*, Hajizadeh Y, Costa Sousa M . (2015a). Population Based Sampling Methods for Geological Well Testing . <i>Computational Geosciences</i> . 19(5): 1089-1107. 2015/09.	<ul style="list-style-type: none"> • Rsrch of Hamdi (PDF) • Supv: Costa Sousa • DOI link
3. Hamdi et al. '15b	GPE / RT-4
Hamdi H*, Behmanesh H, Clarkson CR, Costa Sousa M .(2015b). Using Differential Evolution for Compositional History-Matching of a Tight Gas Condensate Well in the Montney Formation in Western Canada . <i>Journal of Natural Gas Science and Engineering</i> . 26: 1317-1331. 2015/08.	<ul style="list-style-type: none"> ➤ Rsrch of Hamdi (PDF) ➤ Supv: Costa Sousa ➤ DOI link
4. Hasan et al. '15	IVC / RT-4
Hasan M*, Samavati F, Costa Sousa M . (2015). Balanced Multiresolution for Symmetric/Antisymmetric Filters . <i>Graphical Models</i> . 78(C): 36-59. 2015/03.	<ul style="list-style-type: none"> ➤ Thesis of Hasan (PhD) ➤ Supv: Samavati / Costa Sousa ➤ DOI link
5. Vital Brazil et al. '15	IVC / RT-2
Vital Brazil E*, Amorim R*, Costa Sousa M , Velho L, de Figueiredo LH. (2015). Sketch-based Modeling and Adaptive Meshes . <i>Computers & Graphics</i> . 52(C): 116-128. 2015/11.	<ul style="list-style-type: none"> ➤ PhD rsrch. of Vital Brazil (PDF) ➤ Supv: de Figueiredo / Costa Sousa ➤ DOI link

2014 [1 entry]

1. Costa Sousa et al. '14	GPE / RT-3
Costa Sousa M , Vital Brazil E*, Sharlin E. (2014). Scalable and Interactive Visual Computing in Geosciences and Reservoir Engineering . <i>Geological Society, London, Special Publication</i> . <i>Fundamental Controls on Fluid Flow in Carbonates: Current Workflows to Emerging Technologies</i> . 406: 447-466. 2014/11.	<ul style="list-style-type: none"> ➤ Taxonomy & description of selected projects from my IRC pgrm (invited) ➤ DOI link ➤ Vol link

2011 [2 entries]

1. Pereira et al. '11	IVC / RT-2
Pereira T, Vital Brazil E*, Macedo I*, Costa Sousa M , de Figueiredo LH, Velho L (2011). Sketch-based Warping of RGBN Images . <i>Graphical Models</i> . 73(4): 97-110. 2011/07.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ Supv HQP (*): Costa Sousa ➤ DOI link

2.	Vital Brazil et al. '11	IVC / RT-1
	Vital Brazil E*, Macedo I*, Costa Sousa M , Velho L, de Figueiredo LH (2011). Shape and Tone Depiction for Implicit Surfaces . <i>Computers & Graphics</i> . NPAR 2010 Special Issue. 35(1): 43-53. 2011/02.	<ul style="list-style-type: none"> ➤ Rsrch of Vital Brazil (PhD) ➤ Supv: de Figueiredo / Costa Sousa ➤ DOI link

2010 [1 entry]

1.	Bruckner et al. '10	IVC / RT-3
	Bruckner S, Rautek P, Viola I, Roberts M*, Costa Sousa M , Gröller ME. (2010). Hybrid Visibility Compositing and Masking for Illustrative Rendering . <i>Computers & Graphics</i> . Special Issue on Illustrative Visualization. 34(4): 361-369. 2010/08.	<ul style="list-style-type: none"> ➤ My sabbatical leave @ TU-Vienna ➤ Supv: HQP (*): Costa Sousa ➤ DOI link

2009 [3 entries]

1.	Anastacio et al. '09	IVC / RT-2
	Anastacio F*, Prusinkiewicz P, Costa Sousa M . (2009). Sketch-based Parameterization of L-systems using Illustration-Inspired Construction Lines and Depth Modulation . <i>Computers & Graphics</i> . 33(4): 440-451. 2009/08.	<ul style="list-style-type: none"> ➤ Thesis of Anastacio (MSc) ➤ Supv: Costa Sousa / Prusinkiewicz ➤ DOI link
2.	Olsen et al. '09	IVC / RT-2
	Olsen L*, Samavati F, Costa Sousa M , Jorge JA. (2009). Sketch-Based Modeling: A Survey . <i>Computers & Graphics</i> . 33(1): 85-103. 2009/02.	<ul style="list-style-type: none"> ➤ Thesis of Olsen (MSc) ➤ Supv: Samavati / Costa Sousa ➤ DOI link
3.	Paiva et al. '09	IVC / RT-1
	Paiva A, Vital Brazil E, Petronetto F, Costa Sousa M . (2009). Fluid-based Hatching for Tone Mapping in Line Illustrations . <i>The Visual Computer</i> . 25(5-7): 519-527. 2009/03.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ DOI link

5.3.1.2. 2001 – 2008 (U. of Calgary)

2008 [2 entries]

1.	Chen et al. '08	IVC / RT-4
	Chen H-L J*, Samavati F, Costa Sousa M . (2008). GPU-based Point Radiation for Interactive Volume Sculpting and Segmentation . <i>The Visual Computer</i> . 24(7-9): 689 - 698. 2008/05.	<ul style="list-style-type: none"> • Thesis of Chen (MSc) • Supv: Samavati / Costa Sousa • Patent: US20090322748 • DOI link
2.	Maciejewski et al. '08	IVC / RT-1
	Maciejewski R, Isenberg T, Ebert DS, Costa Sousa M , Chen W. (2008). Measuring Stipple Aesthetics in Hand-Drawn and Computer-Generated Images . <i>IEEE Computer Graphics & Applications</i> . 28(2): 62-74. 2008/03.	<ul style="list-style-type: none"> ➤ My Sabbatical @ Purdue U. ➤ Collaborative project ➤ DOI link

2007 [3 entries]

1.	Brosz et al. '07a Brosz J*, Samavati F, Costa Sousa M. (2007a). Terrain Synthesis By-Example. <i>Communications in Computer and Information Science</i>. <i>Advances in Computer Graphics and Computer Vision</i>. Vol 4: 5-77.	IVC / RT-4 ➤ Thesis of Brosz (MSc) ➤ Supv: Samavati /Costa Sousa ➤ Expand ver. of conf. paper [Brosz et al. '06] ➤ DOI link
2.	Brunn et al. '07 Brunn M*, Costa Sousa M, Samavati F. (2007). Capturing and Re-using Artistic Styles with Reverse Subdivision-based Multiresolution Methods. <i>Intl. Journal of Image and Graphics</i>. 7(4): 593-615. 2007/01.	IVC / RT-1 ➤ Thesis of Brunn (MSc) ➤ Supv: Costa Sousa / Samavati ➤ DOI link
3.	Foster et al. '07 Foster K*, Costa Sousa M, Samavati F, Wyvill B. (2007). Polygonal Silhouette Error Correction: A Reverse Subdivision Approach. <i>Intl. Journal of Computational Science and Engineering</i>. 3(1): 53-70. 2007/02.	IVC / RT-1 ➤ Thesis of Foster (MSc) ➤ Supv: Costa Sousa / Wyvill ➤ DOI link

2005 [2 entries]

1.	Foster et al. '05 Foster K*, Jepp P*, Wyvill B, Costa Sousa M, Galbraith C, Jorge JA. (2005). Pen-and-Ink for BlobTree Implicit Models. <i>Computer Graphics Forum</i> (Eurographics '05 Issue), 24(3): 267-276. 2005/09.	IVC / RT-1 ➤ Thesis of Foster (MSc) ➤ Supv: Costa Sousa / Wyvill ➤ DOI link
2.	Streit et al. '05 Streit L*, Federl P, Costa Sousa M. (2005). Modelling Plant Variation through Growth. <i>Computer Graphics Forum</i> (Eurographics '05 Issue), 24(3): 497-506. 2005/09.	IVC / RT-4 ➤ Rsrch of Streit (PDF) ➤ Supv: Costa Sousa ➤ DOI link

2003 [2 entries]

1.	Costa Sousa & Prusinkiewicz '03 Costa Sousa M, Prusinkiewicz P. (2003). A Few Good Lines: Suggestive Drawing of 3D Models. <i>Computer Graphics Forum</i> (Eurographics '03 Issue), 22(3): 327 - 340. 2003/09.	IVC / RT-1 ➤ Collaborative project ➤ DOI link
2.	Costa Sousa et al. '03 Costa Sousa M, Foster K*, Wyvill B, Samavati F. (2003). Precise Ink Drawing of 3D Models. <i>Computer Graphics Forum</i> (Eurographics '03 Issue), 22(3): 369 - 379. 2003/09.	IVC / RT-1 ➤ Collaborative project ➤ Supv HQP (*): Costa Sousa / Wyvill ➤ DOI link

5.3.1.3. 1996 – 2000 (PhD)**2000 & 1999 [2 entries]**

1.	Costa Sousa & Buchanan '00	IVC / RT-1
	Costa Sousa M, Buchanan J. (2000). Observational Models of Graphite Pencil Materials . <i>Computer Graphics Forum</i> , 19(1): 27 - 49. 2000/03.	<ul style="list-style-type: none"> ➤ My PhD Thesis ➤ Supv: Buchanan ➤ DOI link
2.	Costa Sousa & Buchanan '99a	IVC / RT-1
	Costa Sousa M, Buchanan J. (1999a). Computer-Generated Graphite Pencil Rendering of 3D Polygonal Models . <i>Computer Graphics Forum</i> . <i>Eurographics '99 Issue</i> . 18(3): 195-207. 1999/09.	<ul style="list-style-type: none"> ➤ My PhD Thesis ➤ Supv: Buchanan ➤ DOI link

5.4. PEER-REVIEWED CONFERENCES**5.4.1. Conference Reference Entries**

For each reference entry, the full citation is provided, with the following additional information:

- Highly Qualified Personnel (HQP) categories (Sec. 3): PhD, MSc, PDF (postdoc fellow), and VR (visiting researcher).
- Each HQP author is identified with an asterisk (*).
- Discipline Categories: IVC or GPE / primary Research Theme(s): RT-(1, 2, 3, 4, 5); e.g., “IVC / RT-2” means the manuscript is in the disciplines of “Interactive Visual Computing” with a primary Research Theme #2 “Sketch-based Interfaces & Modeling”.
- Context of the publication (i.e., related to thesis research, collaborative projects, supervisory roles)
- Links to the manuscript (DOI or PDF format), clickable from the CV’s PDF version.

5.4.1.1. 2009 – 2018 (U. of Calgary)**2018 [2 entries, as of February 2018]**

1.	Khani <i>et al.</i> '18	GPE / RT-4
	<ul style="list-style-type: none"> ➤ Khani H*, Hamdi H*, Nghiem L, Chen ZX, Costa Sousa M. (2018). Geologically Consistent History Matching of SAGD Process using Probability Perturbation Method. <i>SPE Canada Heavy Oil Technical Conference</i> - SPE-189770-MS. Calgary, AB, Canada. 2018/03. (to appear) 	<ul style="list-style-type: none"> ➤ Thesis of Khani (PhD) ➤ Supv: Chen / Costa Sousa ➤ DOI link (TBD)
2.	Sahaf <i>et al.</i> '18	IVC / RT-3
	Sahaf Z*, Hamdi H*, Costa Sousa M. (2018). A Visual Analytics Framework for Selecting a Diverse Range of Uncertain Reservoir Models . <i>The International Conference on Information Visualization Theory and Applications</i> (IVAPP '18). Funchal, Madeira, Portugal. 2018/01.	<ul style="list-style-type: none"> ➤ Thesis of Sahaf (PhD) ➤ Supv: Costa Sousa / Maurer ➤ DOI link (TBD)

2017 [11 entries]

3.	Hamdi et al. '17b Hamdi H*, Couckuyt I, Costa Sousa M , Dhaene T, Clarkson CR. (2017b). An Adaptive Sampling Strategy to Accelerate Markov Chains Monte Carlo . <i>79th EAGE Conference & Exhibition 2017 - Session: Uncertainty and History Matching – From Exploration to Production</i> . 5 pages. Paris, France. 2017/06.	GPE / RT-4 ➤ Rsrch of Hamdi (PDF) ➤ Supv: Costa Sousa ➤ DOI link
4.	Hamdi et al. '17c Hamdi H*, Costa Sousa M , Behmanesh M. (2017c). Bayesian History-Matching and Probabilistic Forecasting for Tight and Shale Wells . 13 pages. <i>SPE Canada Unconventional Resources Conference</i> . Calgary, AB, Canada, 2017/02.	GPE / RT-4 ➤ Rsrch of Hamdi (PDF) ➤ Supv: Costa Sousa ➤ DOI Link
5.	Khani et al. '17 Khani H*, Hamdi H*, Nghiem L, Chen ZX, Costa Sousa M . (2017). An Improved Regional Segmentation for Probability Perturbation Method . <i>79th EAGE Conference & Exhibition 2017 - Session: Uncertainty and History Matching – from Exploration to Production</i> . 5 pages. Paris, France. 2017/06.	GPE / RT-4 ➤ Thesis of Khani (PhD) ➤ Supv: Chen / Costa Sousa ➤ DOI link
6.	Li et al. '17a Li N*, Sharlin E, Costa Sousa M . (2017a). Duopography: Using Back-of-Device Multi-Touch Input to Manipulate Spatial Data on Mobile Tangible Interactive Topography . <i>SIGGRAPH Asia 2017 Mobile Graphics and Interactive Applications</i> , Bangkok, Thailand. 2017/11.	IVC / RT-5 ➤ Thesis of Li (PhD) ➤ Supv: Costa Sousa / Sharlin ➤ DOI link (TBD)
7.	Li et al. '17b Li N*, Willey W, Sharlin E, Costa Sousa M . (2017a). Visibility Perception and Dynamic Viewsheds for Topographic Maps and Models . <i>5th ACM Symposium on Spatial User Interaction (SUI '17)</i> , Brighton, UK, 2017/10.	IVC / RT-5 ➤ Thesis of Li (PhD) ➤ Supv: Costa Sousa / Sharlin ➤ DOI link (TBD)
8.	Mostafa et al. '17a Mostafa AE*, Sharlin E, Costa Sousa M . (2017). ReflectiveHUD: Designing Spatial Interaction History . <i>2017 ACM Conference Companion Publication on Designing Interactive Systems (DIS '17 Companion)</i> . pp. 233-237. Edinburgh, UK. 2017/06.	IVC / RT-5 ➤ Thesis of Mostafa (PhD) ➤ Supv: Sharlin / Costa Sousa ➤ DOI link
9.	Mostafa et al. '17b Mostafa AE*, Ryu WHA, Takashima K, Chan S, Costa Sousa M , Sharlin E. (2017b) ReflectiveSpineVR: An Immersive Spine Surgery Simulation with Interaction History Capabilities . <i>5th ACM Symposium on Spatial User Interaction (SUI '17)</i> . Brighton, UK. 2017/10	IVC / RT-5 ➤ Thesis of Mostafa (PhD) ➤ Supv: Sharlin / Costa Sousa ➤ DOI link (TBA)

10.	Rocha et al. '17b	IVC / RT-3
	Rocha A*, Silva JD*, Alim U, Costa Sousa M. (2017b). Multivariate Visualization of Oceanography Data Using Decals. 5th EuroVis Workshop on Visualization in Environmental Sciences (EnvirVis '17). Barcelona, Spain, 2017/06.	<ul style="list-style-type: none"> ➤ Thesis of Rocha (PhD) ➤ Supv: Costa Sousa / Alim ➤ DOI link
11.	Sahaf et al. '17a	IVC / RT-3
	Sahaf Z*, Marbouti M, Cabral Ramos Mota R*, Alemasoom H, Maurer F, Costa Sousa M. (2017a). PipeVis: Interactive Visual Exploration of Pipeline Incident Data. 8th Intl. EuroVis Workshop on Visual Analytics (EuroVA '17). Barcelona, Spain, 2017/06.	<ul style="list-style-type: none"> ➤ Thesis of Sahaf (PhD) ➤ Supv: Costa Sousa / Maurer ➤ DOI link
12.	Sahaf et al. '17b	GPE / RT-3
	Sahaf Z*, Hamdi H*, Maurer F, Nghiem L, Chen ZX, Costa Sousa M. (2017b). Filtering Geological Realizations for SAGD. 79th EAGE Conference & Exhibition 2017 - Session: Decision Risk Analysis (EAGE/SPE). 5 pages. Paris, France. 2017/06.	<ul style="list-style-type: none"> ➤ Thesis of Sahaf (PhD) ➤ Supv: Costa Sousa / Maurer ➤ DOI link
13.	Somanath et al. '17	IVC / RT-5
	Somanath S*, Oehlberg L, Hughes J, Sharlin E, Costa Sousa M. (2017). 'Maker' within Constraints: Exploratory Study of Young Learners using Arduino at a High School in India. 2017 CHI Conference on Human Factors in Computing Systems (CHI '17), pp. 96-108. Denver, CO, USA. 2017/05.	<ul style="list-style-type: none"> ➤ Thesis of Somanath (PhD) ➤ Supv: Sharlin / Costa Sousa ➤ DOI link
14.	Zhang et al. '17a	GPE / RT-4
	Zhang Z, Geiger S, Rood M, Jacquemyn C, Jackson MD, Hampson GJ, de Carvalho FM*, Machado Silva CC*, Silva JD*, Costa Sousa M. (2017a). Flow Diagnostics on Fully Unstructured Grids. SPE Reservoir Simulation Conference (RSC '17) - Session 12 Fast Simulation Methods and Next-Generation Simulator Development. 16 pages. Montgomery, TX, USA, 2017/02.	<ul style="list-style-type: none"> ➤ RRM project (Sec. 4) ➤ Supv HQP (*): Costa Sousa ➤ Expand ver. of conf. paper [Zhang et al. '17b] ➤ DOI link

2016 [10 entries]

1.	Cabral R Mota et al. '16a	IVC / RT-5
	Cabral Ramos Mota R*, Cartwright S*, Hamdi H*, Sharlin E, Costa Sousa M, Chen ZX. (2016a). Exploring Immersive Interfaces for Well Placement Optimization in Reservoir Models. 4th ACM Symposium on Spatial User Interaction (SUI '16), pp. 121-130. Tokyo, Japan, 2016/10.	<ul style="list-style-type: none"> ➤ Thesis of Cabral R Mota (MSc) ➤ Supv: Costa Sousa / Sharlin ➤ DOI link
2.	Cabral R Mota et al. '16b	IVC / RT-5
	Cabral Ramos Mota R*, Rea DJ, Le Tran A, Young JE, Sharlin E, Costa Sousa M. (2016b). Playing the 'Trust Game' with Robots: Social Strategies and Experiences. 25th IEEE Intl. Symposium on Robot and Human Interactive Communication (RO-MAN '16), pp. 519-524. New York, NY, USA. 2016/8.	<ul style="list-style-type: none"> • Thesis of Cabral R Mota (MSc) • Supv: Costa Sousa / Sharlin • DOI link

<p>3. Cabral R Mota et al. '16c</p> <p>Cabral Ramos Mota R*, Hamdi H*, Costa Sousa M, Sharlin E, Chen ZX. (2016c). A Visual Framework for Reservoir Connectivity Analysis. 78th EAGE Conference & Exhibition 2016 - Session: Absolute and Relative Permeability – From Pore to Field Scale. Vienna, Austria, 2016/05-06.</p>	<p>GPE / RT-3</p> <ul style="list-style-type: none"> ➤ Thesis of Cabral R Mota (MSc) ➤ Supv: Costa Sousa / Sharlin ➤ DOI link
<p>4. Hamdi & Costa Sousa '16</p> <p>Hamdi H*, Costa Sousa M (2016). Calibrating Geostatistical Models Using Pressure Transient Data. SPE Europec featured at 78th EAGE Conference & Exhibition 2016 - Session: Integrated Dynamic Modelling II. 12 pages. Vienna, Austria, 2016/05-06.</p>	<p>GPE / RT-4</p> <ul style="list-style-type: none"> ➤ Rsrch of Hamdi (PDF) ➤ Supv: Costa Sousa ➤ DOI link
<p>5. Karami Moghadam et al. '16a</p> <p>Karami Moghadam A*, Chen Z, Costa Sousa M. (2016a). Global Sensitivity Analysis of Complex Hydrocarbon Reservoir Models and Dealing with the Curse of Dimensionality. 37th Annual Meeting of the Canadian Applied and Industrial Mathematics Society (CAIMS '16). Edmonton, AB, Canada. 2016/07.</p>	<p>GPE / RT-3</p> <ul style="list-style-type: none"> ➤ Thesis of K Moghadam (PhD) ➤ Supv: Chen / Costa Sousa ➤ DOI link (N/A)
<p>6. Karami Moghadam et al. '16b</p> <p>Karami Moghadam A*, Fedutenko E, Yang C., Nghiem L.X., Chen Z., Costa Sousa M. (2016b). Application of a Novel Single-Layer Neural Network Proxy for Global Sensitivity Analysis of Complex Reservoir Models. EAGE 15th European Conference on the Mathematics of Oil Recovery (ECMOR XV) - Session: Optimization and Sensitivity Analysis. Amsterdam, Netherlands. 2016/08.</p>	<p>GPE / RT-3</p> <ul style="list-style-type: none"> ➤ Thesis of K Moghadam (PhD) ➤ Supv: Chen / Costa Sousa ➤ DOI link
<p>7. Mostafa et al. '16</p> <p>Mostafa AE*, Ryu WHA, Chan S, Sharlin E, Costa Sousa M. (2016). Rethinking Temporospaciality in Everyday Virtual Environments. 2016 IEEE 2nd Workshop on Everyday Virtual Reality, pp. 36-39. Greenville, SC, USA, 2016/03.</p>	<p>IVC / RT-5</p> <ul style="list-style-type: none"> ➤ Thesis of Mostafa (PhD) ➤ Supv: Sharlin / Costa Sousa ➤ DOI link
<p>8. Rocha et al. '16</p> <p>Peer-reviewed Journal article [Rocha et al. '17a] published within a special issue of the <i>IEEE Trans. on Vis. and Comp. Graphics</i> journal and presented orally at the annual <i>IEEE Visualization (SciVis)</i> conference.</p>	<p>IVC / RT-3</p> <ul style="list-style-type: none"> ➤ Thesis of Rocha (PhD) ➤ Supv: Costa Sousa / Alim ➤ DOI link
<p>9. Sahaf et al. '16</p> <p>Sahaf Z*, Hamdi H*, Maurer F, Nghiem L, Costa Sousa M (2016). Clustering of Geological Models for Reservoir Simulation Studies in a Visual Analytics Framework. 78th EAGE Conference & Exhibition 2016 - Session: Quantifying and Managing Uncertainty in Reservoir Modelling. Vienna, Austria, 2016/05-06</p>	<p>GPE / RT-3</p> <ul style="list-style-type: none"> ➤ Thesis of Sahaf (PhD) ➤ Supv: Costa Sousa / Maurer ➤ DOI link
<p>10. Somanath et al. '16</p> <p>Somanath S*, Morrison L, Hughes J, Sharlin E, Costa Sousa M. (2016). Engaging 'At-Risk' Students through Maker Culture Activities. 10th International Conference on Tangible Embedded and Embodied Interaction (TEI'16), pp. 150-158. Eindhoven, Netherlands, 2016/02.</p>	<p>IVC / RT-5</p> <ul style="list-style-type: none"> ➤ Thesis of Somanath (PhD) ➤ Supv: Sharlin / Costa Sousa ➤ DOI link

2015 [10 entries]

1.	Hamdi et al. '15c Hamdi H*, Silva JD*, Coda Marques C*, Costa Sousa M. (2015b). A Visual Steering Software for Geological Well Testing. 77th EAGE Conference and Exhibition 2015 - Session: Well Performance & Well Test. Madrid, Spain. 2015/06.	GPE / RT-3 ➤ Rsrch of Hamdi (PDF) ➤ Supv: Costa Sousa ➤ DOI link
2.	Hamdi et al. '15d Hamdi H*, Hajizadeh Y, Costa Sousa M (2015d). Gaussian Process for Uncertainty Quantification of Reservoir Models. SPE/IATMI Asia Pacific Oil & Gas Conference and Exhibition. 10 pages. Nusa Dua, Bali, Indonesia, 2015/10.	GPE / RT-4 ➤ Rsrch of Hamdi (PDF) ➤ Supv: Costa Sousa ➤ DOI link
3.	Jackson et al. '15 Jackson MD, Hampson GJ, Rood D, Geiger S, Zhang Z, Costa Sousa M , Amorim R*, Vital Brazil E*, Samavati FF, Guimaraes L. (2015). Rapid Reservoir Modeling: Prototyping of Reservoir Models, Well Trajectories and Development Options Using an Intuitive, Sketch-Based Interface. SPE Reservoir Simulation Symposium (RSS '15) - Session 10: Simulator Formulations and Next Generation Frameworks. 17 pages. Houston, TX, USA, 2015/02.	GPE / RT-2 ➤ RRM project (Sec. 4) ➤ Supv HQP (*): Costa Sousa ➤ DOI link
4.	Li et al. '15a Li N*, Rea DJ, Young JE, Sharlin E, Costa Sousa M. (2015a). And He Built a Crooked Camera: A Mobile Visualization Tool to View Four-Dimensional Geometric Objects. SIGGRAPH Asia 2015 Mobile Graphics and Interactive Applications, Article 23, 5 pages. Kobe, Japan. 2015/11.	IVC / RT-3 ➤ Thesis of Li (PhD) ➤ Supv: Costa Sousa / Sharlin ➤ DOI link
5.	Li et al. '15b Li N*, Cartwright S*, Nittala AS*, Sharlin E, Costa Sousa M. (2015b). Flying Frustum: A Spatial Interface for Enhancing Human-UAV Awareness. 3rd Intl. Conference on Human-Agent Interaction (HAI '15), pp. 27-31. Daegu, Korea. 2015/10.	IVC / RT-5 ➤ Thesis of Li (PhD) ➤ Supv: Costa Sousa / Sharlin ➤ DOI link
6.	Martins Filho et al. '15 Martins Filho Z*, Vital Brazil E*, Costa Sousa M. (2015). Exploded View Diagrams of 3D Grids. 28th Conference on Graphics, Patterns and Images (SIBGRAPI '15), pp. 242-249. Salvador, BA, Brazil. 2015/08.	IVC / RT-3 ➤ Thesis of Martins Filho (MSc) ➤ Supv: Costa Sousa ➤ DOI link
7.	Mostafa et al. '15 Mostafa AE*, Takashima K, Sharlin E, Costa Sousa M. (2015). JackVR: A Virtual Reality Training System for Landing Oil Rigs. Advances in Visual Computing. Lecture Notes in Computer Science, 11th Intl. Symposium on Visual Computing (ISVC '15), vol 9475. Springer, Cham., pp. 453-462. Las Vegas, NV, USA, 2015/12.	IVC / RT-5 ➤ Thesis of Mostafa (PhD) ➤ Supv: Sharlin / Costa Sousa ➤ DOI link

8.	Nittala et al. '15	IVC / RT-5
	Nittala AS*, Li N*, Cartwright S*, Takashima K, Sharlin E, Costa Sousa M. (2015). PLANWELL: Spatial User Interface for Collaborative Petroleum Well-Planning. SIGGRAPH Asia 2015 Mobile Graphics and Interactive Applications (SA '15) , Article 19, 8 pages. Kobe, Japan. 2015/11.	<ul style="list-style-type: none"> ➤ Thesis of Nittala (MSc) ➤ Supv: Costa Sousa / Sharlin ➤ DOI link
9.	Somanath et al. '15a	IVC / RT-5
	Somanath S*, Rocha A*, Hamdi H*, Sharlin E, Costa Sousa M. (2015a). ReservoirBench: An Interactive Educational Reservoir Engineering Workbench. 15th UNESCO Intl. Federation for Information Processing (IFIP) TC.13 Intl. Conference on Human-Computer Interaction (INTERACT '15), Lecture Notes in Computer Science, vol 9296. pp. 340-348. Bamberg, Germany. 2015/09.	<ul style="list-style-type: none"> ➤ Thesis of Somanath (PhD) ➤ Supv: Sharlin / Costa Sousa ➤ DOI link
10.	Somanath et al. '15b	IVC / RT-5
	Somanath S*, Hughes J, Sharlin E, Costa Sousa M. (2015b). The Concept of DIY as an Education Model for Indian Public Schools. ACM Conference on Human Factors in Computing Systems (CHI '15) - Workshop 'Designing Alternative Systems for Local Communities'. Seoul, Korea. 2015/04.	<ul style="list-style-type: none"> ➤ Thesis of Somanath (PhD) ➤ Supv: Sharlin / Costa Sousa ➤ DOI Link

2014 [7 entries]

1.	Amorim E et al. '14	IVC / RT-3
	Amorim E*, Vital Brazil E*, Nonato LG, Samavati F, Costa Sousa M. (2014). Multidimensional Projection with Radial Basis Function and Control Points Selection. 7th IEEE Pacific Visualization Symposium (PacificVis '14) , pp. 209-216. Yokohama, Japan, 2014/03.	<ul style="list-style-type: none"> ➤ Thesis of Amorim E (PhD) ➤ Supv: Costa Sousa / Samavati ➤ DOI link
2.	Amorim R et al. '14	IVC / RT-2
	Amorim R*, Vital Brazil E*, Samavati FF, Costa Sousa M. (2014). 3D Geological Modeling using Sketches and Annotations from Geologic Maps. 11th Intl. Symposium on Sketch-Based Interfaces and Modeling (SBIM '14) , pp. 17-25. Vancouver, BC, Canada, 2014/08.	<ul style="list-style-type: none"> • Thesis of Amorim R (PhD) • Supv: Costa Sousa / Samavati • DOI link
3.	Hamdi et al. '14	GPE / RT-4
	Hamdi H*, Hajizadeh Y, Azimi J, Costa Sousa M. (2014). Sequential Bayesian Optimization Coupled with Differential Evolution for Geological Well-Testing. 76th EAGE Conference & Exhibition - Session: Optimisation Approaches Applied to Geomodel and Recovery. Amsterdam, Netherlands, 2014/06.	<ul style="list-style-type: none"> ➤ Rsrch of Hamdi (PDF) ➤ Supv: Costa Sousa ➤ DOI link
4.	Li et al. '14a	IVC / RT-5
	Li N*, Nittala AS*, Sharlin E, Costa Sousa M. (2014a). Shvil: Collaborative Augmented Reality Land Navigation. CHI '14 Extended Abstracts on Human Factors in Computing Systems (CHI EA '14) , pp. 1291-1296. Toronto, Canada, 2014/04-05.	<ul style="list-style-type: none"> • Thesis of Li (PhD) • Supv: Costa Sousa / Sharlin • DOI link

5.	Li et al. '14b	IVC / RT-5
	Li N*, Cartwright S*, Sharlin E, Costa Sousa M. (2014b). Ningyo of the CAVE: Robots as Social Puppets of Static Infrastructure. 2nd Intl. Conference on Human-Agent Interaction (HAI '14), pp. 39-44. Tsukjuba, Japan, 2014/10.	<ul style="list-style-type: none"> • Thesis of Li (PhD) • Supv: Costa Sousa / Sharlin • DOI link
6.	Somanath et al. '14	IVC / RT-3
	Somanath S*, Carpendale S, Sharlin E, Costa Sousa M. (2014). Information Visualization Techniques for Exploring Oil Well Trajectories in Reservoir Models. Graphics Interface (GI '14), pp. 145-150. Montreal, QC, Canada, 2014/05.	<ul style="list-style-type: none"> ➤ Thesis of Somanath (MSc) ➤ Supv: Costa Sousa / Sharlin ➤ DOI link
7.	Vital Brazil et al. '14	IVC / RT-2
	Vital Brazil E*, Amorim R*, Costa Sousa M, Velho L, de Figueiredo LH. (2014). A Sketch-Based Modeling Framework Based on Adaptive Meshes. 27th SIBGRAPI Conference on Graphics, Patterns and Images (SIBGRAPI '14). <i>IEEE Computer Society</i> , pp. 17-24. Rio de Janeiro, RJ, Brazil, 2014/08.	<ul style="list-style-type: none"> ➤ Rsrch of Vital Brazil (PDF) ➤ Supv: Costa Sousa ➤ DOI link

2013 [11 entries]

1.	Burns et al. '13	IVC / RT-5
	Burns C*, Seyed T*, Hellmann T, Costa Sousa M, Maurer F. (2013). A Usable API for Multi-Surface Systems. ACM Conference on Human Factors in Computing Systems (CHI '13) - <i>Workshop 'Blended Interactions: Envisioning Future Collaborative Interactive Spaces'</i> . Paris, France, 2013/04.	<ul style="list-style-type: none"> ➤ Thesis of Burns (MSc) ➤ Supv: Maurer / Costa Sousa ➤ DOI link
2.	Cevolani et al. '13	GPE / RT-3
	Cevolani JT*, Mostafa AE*, Vital Brazil E*, Costa de Oliveira L, da Fonseca LG, Costa Sousa M. (2013). Computational Methodology to Study Heterogeneities in Petroleum Reservoirs. 75th EAGE Conference & Exhibition / SPE EUROPEC 2013 - Session: Integrated Basin Reservoir Geology. London, UK, 2013/06.	<ul style="list-style-type: none"> ➤ Rsrch of Cevolani (VR) ➤ Supv: Costa Sousa ➤ DOI link
3.	Hajizadeh et al. '13	GPE / RT-4
	Hajizadeh Y*, Nghiem L, Mirzabozorg A, Yang C, Costa Sousa M (2013). A Soft and Law-Abiding Framework for History Matching under Uncertainty. SPE Reservoir Simulation Symposium, Woodlands, TX, USA, 2013/02.	<ul style="list-style-type: none"> ➤ Rsrch of Hajizadeh (PDF) ➤ Supv: Costa Sousa ➤ DOI link
4.	Hamdi et al. '13	GPE / RT-4
	Hamdi H*, Ghahri P, Costa Sousa M, Corbett P. (2013). Application of Two-phase Pseudo-pressure in Gas-Condensate Well-Testing with and without Positive Coupling and Inertia. 75th EAGE Conference & Exhibition incorporating SPE EUROPEC 2013 - Session: EAGE/SPE - Reservoir Evaluation & Management. London, UK, 2013/06.	<ul style="list-style-type: none"> ➤ Rsrch of Hamdi (PDF) ➤ Supv: Costa Sousa ➤ DOI link

5.	Mostafa et al. '13a	IVC / RT-3
	Mostafa AE*, Carpendale S, Vital Brazil E*, Eaton D, Sharlin E, Costa Sousa M (2013a). FracVis: Visualizing Microseismic Events. 9th Intl. Symposium on Visual Computing (ISVC '13). <i>Advances in Visual Computing, Lecture Notes in Computer Science (Springer Berlin Heidelberg)</i> . Rethymnon, Crete, Greece, 2013/07.	<ul style="list-style-type: none"> ➤ Thesis of Mostafa (MSc) ➤ Supv: Costa Sousa / Sharlin ➤ DOI link
6.	Mostafa et al. '13b	IVC / RT-5
	Mostafa AE*, Greenberg S, Vital Brazil E*, Sharlin E, Costa Sousa M. (2013b). Interacting with Microseismic Visualizations. CHI '13 Extended Abstracts on Human Factors in Computing Systems (CHI EA '13), pp. 1749-1754. Paris, France, 2013/04-05.	<ul style="list-style-type: none"> ➤ Thesis of Mostafa (MSc) ➤ Supv: Costa Sousa / Sharlin ➤ DOI link
7.	Seyed et al. '13a	IVC / RT-5
	Seyed T*, Tang T, Maurer F, Costa Sousa M (2013a). SkyHunter: A Multi-Surface Environment for Supporting Oil and Gas Exploration. 8th ACM Intl. Conference on Interactive Tabletops and Surfaces (ITS '13), pp. 15-22. St Andrews, UK, 2013/10.	<ul style="list-style-type: none"> ➤ Thesis of Seyed (MSc) ➤ Supv: Maurer / Costa Sousa ➤ DOI link
8.	Seyed et al. '13b	IVC / RT-5
	Seyed T*, Burns C*, Costa Sousa M , Maurer F (2013b). From Small Screens to Big Displays: Understanding Interaction in Multi-Display Environments. ACM Intl. Conference on Intelligent User Interfaces (IUI '13), pp. 33-36. Santa Monica, CA, USA. 2013/03.	<ul style="list-style-type: none"> ➤ Thesis of Seyed (MSc) ➤ Supv: Maurer / Costa Sousa ➤ DOI link
9.	Seyed et al. '13c	IVC / RT-5
	Seyed T*, Burns C*, King P, Rodrigues FM, Maurer F, Costa Sousa M. (2013c). MRI Table Kinect: A Multi-Surface Application for Exploring Volumetric Medical Imagery. Workshop on Safer Interaction in Medical Devices (MediCHI '13). Paris, France, 2013/04.	<ul style="list-style-type: none"> ➤ Thesis of Seyed (MSc) ➤ Supv: Maurer / Costa Sousa ➤ DOI link
10.	Somanath et al. '13a	IVC / RT-5
	Somanath S*, Sharlin E, Costa Sousa M (2013a). Integrating a Robot in a Tabletop Reservoir Engineering Application. 8th ACM/IEEE Intl. Conference on Human-Robot Interaction (HRI '13) - 'Late-Breaking Report'. Tokyo, Japan, 2013/03.	<ul style="list-style-type: none"> ➤ Thesis of Somanath (MSc) ➤ Supv: Costa Sousa / Sharlin ➤ DOI link
11.	Somanath et al. '13b	IVC / RT-5
	Somanath S*, Sharlin E, Costa Sousa M. (2013b). Beyond Actuated Tangibles: Introducing Robots to Interactive Tabletops. 7th Intl. Conference on Tangible, Embedded and Embodied Interaction (TEI '13) - 'Work In Progress (WIP)'. Barcelona, Spain, 2013/02.	<ul style="list-style-type: none"> • Thesis of Somanath (MSc) • Supv: Costa Sousa / Sharlin • DOI link

12.	Sultanum et al. '13	IVC / RT-5
	Sultanum N*, Vital Brazil E*, Costa Sousa M. (2013). Navigating and Annotating 3D Geological Outcrops Through Multi-Touch Interaction. 8th ACM Intl. Conference on Interactive Tabletops and Surfaces (ITS '13), pp. 345-348. St Andrews, UK, 2013/10.	<ul style="list-style-type: none"> • Thesis of Sultanum (MSc) • Supv: Costa Sousa / Sharlin • DOI link
2012 [15 entries]		
1.	Amorim E et al. '12a	IVC / RT-3
	Amorim E*, Vital Brazil E*, Daniels II J, Joia P, Nonato LG, Costa Sousa M. (2012a). iLAMP: Exploring High-Dimensional Spacing through Backward Multidimensional Projection. 7th IEEE Conference of Visual Analytics Science and Technology (VAST '12), pp. 53 - 62. Seattle, WA, USA, 2012/10.	<ul style="list-style-type: none"> ➤ Thesis of Amorim E (PhD) ➤ Supv: Costa Sousa / Samavati ➤ DOI link
2.	Amorim E et al. '12b	GPE / RT-3
	Amorim E*, Hajizadeh Y*, Nghiem L, Costa Sousa M. (2012b). Interactive Visualization and Analysis of Optimization Algorithms and Large Parameter Spaces for Reservoir Geoscience and Engineering. CSEG / CSPG / CWLS GeoConvention 2012: Vision . Calgary, AB, Canada, 2012/05.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ Supv: Costa Sousa / Samavati ➤ PDF link
3.	Amorim R et al. '12a	IVC / RT-2
	Amorim R*, Vital Brazil E*, Patel D, Costa Sousa M. (2012a). Sketch Modeling of Seismic Horizons from Uncertainty. 9th Intl. Symposium on Sketch-Based Interfaces and Modeling (SBIM '12), 1-10. Annecy, France, 2012/06.	<ul style="list-style-type: none"> ➤ Thesis of Amorim R (PhD) ➤ Supv: Costa Sousa / Samavati ➤ DOI link
4.	Amorim R et al. '12b	GPE / RT-2
	Amorim R*, Boroumand N, Vital Brazil E*, Hajizadeh Y*, Eaton D, Costa Sousa M. (2012b). Interactive Sketch-Based Estimation of Stimulated Volume in Unconventional Reservoirs using Microseismic Data. 13th European Conference on the Mathematics of Oil Recovery (ECMOR XIII). Biarritz, France, 2012/09.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ Supv HQP (*): Costa Sousa ➤ PDF link
5.	Amorim R et al. '12c	GPE / RT-2
	Amorim R*, Vital Brazil E*, Patel D, Costa Sousa M. (2012c). Interactive Reservoir Geomodelling from Uncertainty. CSEG / CSPG / CWLS GeoConvention 2012: Vision . Calgary, AB, Canada, 2012/05.	<ul style="list-style-type: none"> ➤ Thesis of Amorim R (PhD) ➤ Supv: Costa Sousa / Samavati ➤ PDF link
6.	Burns et al. '12a	IVC / RT-5
	Burns C*, Seyed T, Hellmann TD, Ferreira J, Maurer F, Costa Sousa M. (2012a). Towards a Usable API for Constructing Interactive Multi-Surface Systems. Workshop on Infrastructure and Design Challenges of Coupled Display Visual Interfaces – in conjunction with Advanced Visual Interfaces 2012 (AVI'12) . Capri, Italy, 2012/05.	<ul style="list-style-type: none"> ➤ Thesis of Burns (MSc) ➤ Supv: Maurer / Costa Sousa ➤ DOI link

7.	Burns et al. '12b	GPE / RT-5
	Burns C*, Seyed T*, Bradley K, Duncan R, Balasch A, Maurer F, Costa Sousa M. (2012b). Multi-Surface Visualization of Fused Hydrocarbon Microseep and Reservoir Data. <i>CSEG / CSPG / CWLS GeoConvention 2012: Vision</i> (Best Student Integrated Extended Abstract + Poster Presentation Award). Calgary, AB, Canada, 2012/05.	<ul style="list-style-type: none"> ➤ Thesis of Burns (MSc) ➤ Supv: Maurer / Costa Sousa ➤ DOI link
8.	Hajizadeh et al. '12	GPE / RT-3
	Hajizadeh Y*, Amorim E*, Costa Sousa M. (2012). Building Trust in History Matching: The Role of Multidimensional Projection. <i>74th EAGE Conference & Exhibition / SPE EUROPEC 2012</i> , (SPE 152754). Copenhagen, Denmark, 2012/06.	<ul style="list-style-type: none"> ➤ Rsrch of Hajizadeh (PDF) ➤ Supv: Costa Sousa ➤ DOI link
9.	Karami Moghadam et al. '12	GPE / RT-3
	Karami Moghadam A*, Sultanum NB*, Martins Filho Z*, Miranda-Filho DN, Hamdi H*, Chen Z, Costa Sousa M. (2012). Interactive Visual Steering for Reservoir Geoscience and Engineering. <i>CSEG / CSPG / CWLS GeoConvention 2012: Vision</i> . Calgary, AB, Canada, 2012/05.	<ul style="list-style-type: none"> ➤ Thesis of Karami Moghadam (PhD) ➤ Supv: Chen / Costa Sousa ➤ PDF link
10.	Lapides et al. '12	IVC / RT-5
	Lapides P*, Sultanum NB*, Sharlin E, Costa Sousa M. (2012). Seamless Mixed Reality Tracking in Tabletop Reservoir Engineering Interaction. <i>Intl. Working Conference on Advanced Visual Interfaces (AVI '12)</i> , pp. 725 - 728. Capri, Italy, 2012/05.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ Supv HQP (*): Costa Sousa / Sharlin ➤ DOI link
11.	Martins Filho et al. '12	IVC / RT-3
	Martins Filho Z*, de Carvalho F*, Vital Brazil E*, Marroquim R, Costa Sousa M. (2012). Cutaway Applied to Corner Point Models. <i>Workshop on Industry Applications (WGARI), XXV Conference on Graphics, Patterns and Images (SIBGRAPI '12)</i> , IEEE Computer Society, pp. 7 - 12. Ouro Preto, MG, Brazil, 2012/10.	<ul style="list-style-type: none"> ➤ Thesis of Martins Filho (MSc) ➤ Supv: Costa Sousa ➤ PDF link
12.	Mostafa et al. '12	GPE / RT-3
	Mostafa AE*, Amorim R*, Vital Brazil E*, Eaton D, Carpendale, S, Sharlin E, Costa Sousa M. (2012). Exploratory Visual Modeling and Analysis of Microseismic Events. <i>CSEG / CSPG / CWLS GeoConvention 2012: Vision</i> . Calgary, AB, Canada, 2012/05.	<ul style="list-style-type: none"> ➤ Thesis of Mostafa (MSc) ➤ Supv: Costa Sousa / Sharlin ➤ PDF link
13.	Seyed et al. '12	IVC / RT-5
	Seyed T*, Burns C*, Costa Sousa M. , Maurer F, Tang A. (2012). Eliciting usable Gestures for Multi-Display Environments. <i>7th ACM Intl. Conference on Interactive Tabletops and Surfaces (ITS '12)</i> , pp. 41 - 50, Cambridge, MA, USA, 2012/11.	<ul style="list-style-type: none"> ➤ Thesis of Seyed (MSc) ➤ Supv: Maurer / Costa Sousa ➤ DOI link

14.	Somanath et al. '12	GPE / RT-3
	Somanath S*, Sultanum NB*, Medeiros J*, Vital Brazil E*, Carpendale S, Sharlin E, Dal Sasso Freitas C, Mackay E, Costa Sousa M. (2012). Interactive 3D Modeling and Visualization of Well Configurations and Trajectories in Reservoir Simulation Post-Processing. <i>CSEG / CSPG / CWLS GeoConvention 2012: Vision</i> . Calgary, AB, Canada, 2012/05.	<ul style="list-style-type: none"> ➤ Thesis of Somanath (MSc) ➤ Supv: Costa Sousa / Sharlin ➤ PDF link
15.	Sultanum et al. '12	GPE / RT-5
	Sultanum NB*, Somanath S*, Lapedes P*, Miranda-Filho DN, Eastick R, Sharlin E, Costa Sousa M. (2012). Interactive Tabletops for Visual Analysis of Reservoir Models. <i>CSEG / CSPG / CWLS GeoConvention 2012: Vision</i> . Calgary, AB, Canada, 2012/05.	<ul style="list-style-type: none"> ➤ Thesis of Sultanum (MSc) ➤ Supv: Costa Sousa / Sharlin ➤ PDF link

2011 [3 entries]

1.	Harris et al. '11	IVC / RT-5
	Harris J, Young J, Sultanum N*, Lapedes P*, Sharlin E, Costa Sousa M. (2011). Designing Snake: A Tangible User Interface Supporting Well Path Planning. <i>13th UNESCO Intl. Federation for Information Processing (IFIP) TC13 Conference on Human-Computer Interaction (INTERACT '11)</i> , pp. 45 - 53. Lisbon, Portugal, 2011/09.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ Supv HQP (*): Costa Sousa / Sharlin ➤ DOI link
2.	Paiva et al. '11	IVC / RT-2
	Paiva A, Amorim R*, Velho L, Costa Sousa M. (2011). Sketch-Based Adaptive Mesh Augmentation using Stellar Operators. <i>24th Conf. on Graphics, Patterns, and Images (SIBGRAPI '11)</i> , IEEE Computer Society, pp. 78 - 85. Maceió, AL, Brazil, 2011/08.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ Supv HQP (*): Costa Sousa ➤ DOI link
3.	Sultanum et al. '11	IVC / RT-5
	Sultanum NB*, Somanath S*, Sharlin E, Costa Sousa M. (2011). "Point It, Split It, Peel It, View It": Techniques for Interactive Reservoir Visualization on Tabletops. <i>6th ACM Intl. Conference on Interactive Tabletops and Surfaces (ITS '11)</i> , pp. 191 - 201. Kobe, Japan, 2011/10-11.	<ul style="list-style-type: none"> • Thesis of Sultanum (MSc) • Supv: Costa Sousa / Sharlin • DOI link

2010 [5 entries]

1.	dos Passos et al. '10	IVC / RT-4
	dos Passos VA, Walter M, Costa Sousa M. (2010). Sample-Based Synthesis of Illustrative Patterns. <i>18th Pacific Conference on Computer Graphics and Applications</i> (Pacific Graphics '10), pp. 109-116. Hangzhou, China, 2010/09.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ DOI link

2.	Roberts et al. '10 Roberts M*, Packer J, Costa Sousa M , Mitchell R. (2010). A Work-Efficient GPU Algorithm for Level Set Segmentation . <i>7th ACM SIGGRAPH/Eurographics High-Performance Graphics</i> (HPG '10), pp. 123 - 132. Saarbrücken, Germany, 2010/06.	IVC / RT-4 ➤ Thesis of Roberts (MSc) ➤ Supv: Costa Sousa / Mitchell ➤ Patent: US20110074780 A1 ➤ ACM link
3.	Sultanum et al. '10 Sultanum NB*, Sharlin E, Costa Sousa M , Miranda-Filho DN, Eastick R. (2010). Touching the Depths: Introducing Tabletop Interaction to Reservoir Engineering . <i>5th ACM Intl. Conference on Interactive Tabletops and Surfaces</i> (ITS '10), pp. 105 - 108. Saarbrücken, Germany, 2010/11.	IVC / RT-5 • Thesis of Sultanum (MSc) • Supv: Costa Sousa / Sharlin • DOI link
4.	Vital Brazil et al. '10a Vital Brazil E*, Macedo I*, Costa Sousa M , Velho L, de Figueiredo LH (2010a). A Few Good Samples: Shape & Tone Depiction for Hermite RBF Implicits . <i>8th Intl. Symposium on Non-Photorealistic Animation and Rendering</i> (NPAR '10), pp. 7 - 15. Annecy, France, 2010/06.	IVC / RT-1 ➤ Thesis of Vital Brazil (PhD) ➤ Supv: de Figueiredo / Costa Sousa ➤ DOI link
5.	Vital Brazil et al. '10b Vital Brazil E*, Macedo I*, Costa Sousa M , Velho L, de Figueiredo LH (2010b). Sketching Variational Hermite-RBF Implicits . <i>7th Eurographics Symposium on Sketch-Based Interfaces and Modeling</i> (SBIM '10), pp. 1 - 8. Annecy, France, 2010/06.	IVC / RT-2 ➤ Thesis of Vital Brazil (PhD) ➤ Supv: de Figueiredo / Costa Sousa ➤ DOI link

2009 [3 entries]

1.	Jepp et al. '09 Jepp P*, de Araujo BR, Jorge JA, Wyvill B, Costa Sousa M (2009). Style Nodes for Hierarchical Tree-Based Implicit Surface Modelling . <i>5th Intl Symposium on Computational Aesthetics in Graphics, Visualization and Imaging</i> (CAE '09), pp. 41 - 48. Victoria, BC, Canada, 2009/05.	IVC / RT-1 ➤ Thesis of Jepp (PhD) ➤ Supv: Wyvill / Costa Sousa ➤ DOI link
2.	Kim et al. '09 Kim S, Maciejewski R, Isenberg T, Andrews WM, Chen W, Costa Sousa M , Ebert DS. (2009). Stippling by Example . <i>7th Intl. Symposium on Non-Photorealistic Animation and Rendering</i> (NPAR '09), pp. 41 - 50. New Orleans, LA, USA, 2009/08.	IVC / RT-1 ➤ My Sabbatical @ Purdue U. ➤ Collaborative project ➤ DOI link
3.	Medeiros et al. '09 Medeiros J*, Costa Sousa M , Velho L, Freitas C. (2009). Perspective Contouring in Illustrative Visualization . <i>XXII Brazilian Symposium on Computer Graphics and Image Processing</i> (SIBGRAPI '09), <i>IEEE Computer Society</i> , pp. 48 - 55. Rio de Janeiro, RJ, Brazil, 2009/10.	IVC / RT-1 • Thesis of Medeiros (MSc) • Supv: Freitas / Costa Sousa • DOI link

5.4.1.2. 2001 – 2008 (U. of Calgary)

2008 [7 entries]

1.	Anastacio et al. '08	IVC / RT-2
	Anastacio F*, Prusinkiewicz P, Costa Sousa M. (2008). Sketch-based Parameterization of L-systems using Illustration-inspired Construction Lines. <i>5th Eurographics Workshop on Sketch-based Interfaces and Modeling</i> (SBIM '08), pp. 119 - 126. Annecy, France, 2008/06.	<ul style="list-style-type: none"> ➤ Thesis of Anastacio (MSc) ➤ Supv: Costa Sousa / Prusinkiewicz ➤ DOI link
2.	Jepp et al. '08	IVC / RT-1
	Jepp P*, Denzinger J, Wyvill B, Costa Sousa M. (2008). Using Multi-Agent Systems for Illustrative Rendering of Implicit Surfaces. <i>21st Brazilian Symposium on Computer Graphics and Image Processing</i> (SIBGRAPI '08), pp. 255 - 262. Campo Grande, Mato Grosso do Sul, Brazil, 2008/10.	<ul style="list-style-type: none"> • Thesis of Jepp (PhD) • Supv: Wyvill / Costa Sousa • DOI link
3.	Lapides et al. '08	IVC / RT-5
	Lapides P*, Sharlin E, Costa Sousa M. (2008). Three-Dimensional Tangible User Interface for Controlling a Robotic Team. <i>ACM/IEEE Intl. Conference on Human-Robot Interaction</i> (HRI '08), pp. 343 - 350. Amsterdam, The Netherlands, 2008/03.	<ul style="list-style-type: none"> ➤ Thesis of Lapides (MSc) ➤ Supv: Sharlin / Costa Sousa ➤ DOI link
4.	Olsen et al. '08	IVC / RT-2
	Olsen L*, Samavati F, Costa Sousa M, Jorge JA. (2008). Taxonomy of Modeling Techniques using Sketch-Based Interfaces. <i>Eurographics 2008 STAR Report</i> , pp. 33 - 57. Crete, Greece, 2008/04.	<ul style="list-style-type: none"> ➤ Thesis of Olsen (MSc) ➤ Supv: Samavati / Costa Sousa ➤ DOI link
5.	Proença et al. '08	IVC / RT-1
	Proença J*, Jorge JA, Costa Sousa M. (2008). Suggestive Contours over Point-Set Implicits. <i>3rd Intl. Conference on Computer Graphics Theory and Applications</i> (GRAPP '08), Paper No. 110, pp. 171 - 180. Funchal, Madeira, Portugal, 2008/01.	<ul style="list-style-type: none"> ➤ Thesis of Proença (MSc) ➤ Supv: Jorge / Costa Sousa ➤ DOI link
6.	Viola & Costa Sousa '08	IVC / RT-5
	Viola I, Costa Sousa M. (2008). Intuitive and Ergonomic Interaction in Illustrative Visualization. <i>Eurographics</i> (EG '08), <i>Tutorial #8 - Interactive Tools for Scientific and Medical Illustration Composition</i> . Crete, Greece, 2008/04.	<ul style="list-style-type: none"> ➤ Conference Tutorial [Costa Sousa et al. '08] (Sec 2) ➤ PDF link
7.	Xin et al. '08	IVC / RT-2
	Xin M*, Sharlin E, Costa Sousa M. (2008). Napkin Sketch - Handheld Mixed Reality 3D Sketching. <i>ACM Symposium on Virtual Reality Software and Technology</i> (VRST '08), pp. 223 - 226. Bordeaux, France, 2008/10.	<ul style="list-style-type: none"> ➤ Thesis of Min (MSc) ➤ Supv: Sharlin / Costa Sousa ➤ DOI link

2007 [8 entries]

1.	Brosz et al. '07b Brosz J*, Samavati F, Carpendale S, Costa Sousa M. (2007). Single Camera Flexible Projection. 5th Intl. Symposium on Non-Photorealistic Animation and Rendering (NPAR '07), pp. 33 - 42. San Diego, CA, USA. 2007/08.	IVC / RT-1 ➤ Thesis of Brosz (MSc) ➤ Supv: Samavati / Costa Sousa ➤ DOI link
2.	Costa Sousa '07 Costa Sousa M. (2007). Sketch-based Interfaces and Modeling + Non-Photorealistic Rendering for Implicit Surfaces. Computer Graphics International (CGI '07), <i>Tutorial #2 - An Introduction to Implicit Modelling Techniques</i> . Petropolis, RJ, Brazil, 2007/05-06.	IVC / RT-2 ➤ Conference Tutorial [Costa Sousa '07] (Sec 2)
3.	Maciejewski et al. '07 Maciejewski R, Isenberg T, Andrews WM, Ebert DS, Costa Sousa M. (2007). Aesthetics of Hand-Drawn vs. Computer-Generated Stippling. 3rd Intl. Symposium on Computational Aesthetics in Graphics, Visualization and Imaging (CAe '07), pp. 53 - 56. Banff, AB, Canada, 2007/06.	IVC / RT-1 ➤ My Sabbatical @ Purdue U. ➤ Collaborative project ➤ DOI link
4.	Olsen et al. '07 Olsen L*, Samavati F, Costa Sousa M. (2007). Fast Stroke Matching by Angle Quantization. First Intl. Conference on Immersive Communications (IMMERSCOM '07), Bussolengo, Verona, Italy, 2007/10. ICST (Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering, Brussels, Belgium), Article No. 6, 6 pages.	IVC / RT-2 ➤ Thesis of Olsen (MSc) ➤ Supv: Samavati / Costa Sousa ➤ DOI link
5.	Proença et al. '07 Proença J*, Jorge JA, Costa Sousa M (2007). Sampling Point-Set Implicits. 4th IEEE/Eurographics Symposium on Point-Based Graphics (PBG '07). Prague, Czech Republic, 2007/09.	IVC / RT-4 ➤ Thesis of Proença (MSc) ➤ Supv: Jorge / Costa Sousa ➤ DOI link
6.	Rivotti et al. '07 Rivotti V*, Proença J*, Jorge JA, Costa Sousa M. (2007). Composition Principles for Quality Depiction and Aesthetics. 3rd Intl. Symposium on Computational Aesthetics in Graphics, Visualization and Imaging (CAe '07), pp. 37 - 44. Banff, AB, Canada, 2007/06.	IVC / RT-1 ➤ Thesis of Rivotti (MSc) ➤ Supv: Jorge / Costa Sousa ➤ DOI link
7.	Xin et al. '07 Xin M*, Sharlin E, Costa Sousa M , Greenberg S, Samavati F. (2007). Purple Crayon - From Sketches to Interactive Environment. Intl. Conference on Advances in Computer Entertainment Technology (ACE '07), pp. 208 - 211. Salzburg, Austria, 2007/06.	IVC / RT-5 • Thesis of Xin (MSc) • Supv: Sharlin / Costa Sousa • DOI link

8.	Schmidt et al. '07	IVC / RT-2
	Schmidt R, Wyvill B, Costa Sousa M , Jorge JA. (2007). ShapeShop: Sketch-based Solid Modeling with BlobTrees . <i>ACM SIGGRAPH 2007 courses</i> (SIGGRAPH '07). Article 43. San Diego, CA, USA. 2007/08.	<ul style="list-style-type: none"> ➤ Conference course notes ➤ DOI link
2006 [16 entries]		
1.	Anastacio et al. '06	IVC / RT-2
	Anastacio F*, Costa Sousa M , Samavati F, Jorge JA. (2006). Modeling Plant Structures Using Concept Sketches . <i>4th Intl. Symposium on Non-Photorealistic Animation and Rendering</i> (NPAR '06), pp. 105 - 113. Annecy, France, 2006/06.	<ul style="list-style-type: none"> ➤ Thesis of Anastacio (MSc) ➤ Supv: Costa Sousa ➤ DOI link
2.	Brosz et al. '06	IVC / RT-4
	Brosz J*, Samavati F, Costa Sousa M . (2006). Terrain Synthesis By-Example . <i>First Intl. Conference on Computer Graphics Theory and Applications</i> (GRAPP '06), pp. 122 - 133. Setubal, Portugal, 2006/02.	<ul style="list-style-type: none"> ➤ Thesis of Brosz (MSc) ➤ Supv: Samavati / Costa Sousa ➤ DOI link
3.	Chen et al. '06	IVC / RT-2
	Chen H-L J*, Samavati F, Costa Sousa M , Mitchell JR. (2006). Sketch-based Volumetric Seeded Region Growing . <i>3rd Eurographics Workshop on Sketch-based Interfaces and Modeling</i> (SBIM '06), pp. 123 - 129. Vienna, Austria, 2006/09.	<ul style="list-style-type: none"> ➤ Thesis of Chen (MSc) ➤ Supv: Samavati / Costa Sousa ➤ Patent: US20090322748 ➤ DOI link
4.	Costa Sousa '06a	IVC / RT-3
	Costa Sousa M . (2006a). Illustrative Visualization Framework . <i>IEEE Visualization</i> (Vis '06), Tutorial #3 - <i>Illustrative Visualization for Medicine and Science</i> . Baltimore, MD, USA, 2006/10-11.	<ul style="list-style-type: none"> ➤ Conference tutorial [Ebert et al. '06] (Sec. 2)
5.	Costa Sousa '06b	IVC / RT-3
	Costa Sousa M . (2006b). Illustrative Contextual Close-up Views of Volumetric Data . <i>IEEE Visualization</i> (Vis '06), Tutorial #3 - <i>Illustrative Visualization for Medicine and Science</i> . Baltimore, MD, USA, 2006/10-11.	<ul style="list-style-type: none"> ➤ Conference tutorial [Ebert et al. '06] (Sec. 2)
6.	Costa Sousa '06c	IVC / RT-1
	Costa Sousa M . (2006c). Overview of NPR for Computerized Illustration . <i>SIGGRAPH 2006, Course #6 - Illustrative Visualization for Medicine and Science</i> . Boston, MA, USA, 2006/08.	<ul style="list-style-type: none"> ➤ Conference course [Ebert & Costa Sousa '06] (Sec. 2) ➤ DOI link

7.	Costa Sousa '06d	IVC / RT-1
	Costa Sousa M. (2006d). Overview of NPR for Computerized Illustration. Eurographics (EG '06), <i>Tutorial #11 - Illustrative Visualization for Medicine and Science</i> . Vienna, Austria, 2006/09.	➤ Conference tutorial [Viola et al. '06] (Sec. 2)
8.	Costa Sousa et al. '06	IVC / RT-3
	Costa Sousa M., Ebert DS, Stredney D, Svakhine N. (2006). Illustrative Visualization for Medical Training. Eurographics (EG '06), <i>Tutorial #11 - Illustrative Visualization for Medicine and Science</i> . Vienna, Austria, 2006/09.	➤ Conference tutorial [Viola et al. '06] (Sec. 2) ➤ DOI link
9.	Isenberg et al. '06	IVC / RT-1
	Isenberg T, Neumann P, Carpendale S, Costa Sousa M, Jorge JA. (2006). Non-Photorealistic Rendering in Context: An Observational Study. 4th Intl. Symposium on Non-Photorealistic Animation and Rendering (NPAR '06), pp. 115 - 126. Annecy, France, June 2006.	➤ Collaborative project ➤ DOI link
10.	Jepp et al. '06	IVC / RT-1
	Jepp P*, Wyvill B, Costa Sousa M. (2006). Smarticles for Sampling and Rendering Implicit Models. EG UK Theory and Practice of Computer Graphics 2006 (TPCG '06, Eurographics UK Chapter), pp. 39 - 46. Teesside, UK, 2006/06.	➤ Thesis of Jepp (PhD) ➤ Supv: Wyvill / Costa Sousa ➤ DOI link
11.	Lapides et al. '06	IVC / RT-5
	Lapides P*, Sharlin E, Costa Sousa M, Streit L.* (2006). The 3D Tractus: A Three-Dimensional Drawing Board. First IEEE Intl. Workshop on Horizontal Interactive Human-Computer Systems (TABLETOP '06), pp. 169 - 176. Adelaide, Australia, 2006/01.	➤ Collaborative project ➤ Supv (Lapides, MSc): Sharlin / Costa Sousa ➤ Supv (Streit, PDF): Costa Sousa ➤ DOI link
12.	Luo et al. '06	IVC / RT-1
	Luo Y, Gavrilova M, Costa Sousa M. (2006). NPAR by Example: Line Drawing Facial Animation from Photographs. 3rd Intl. Conference on Computer Graphics, Imaging and Visualization (CGIV '06), pp. 514 - 521. Sydney, Australia, 2006/07.	➤ Collaborative project ➤ DOI link
13.	Severn et al. '06	IVC / RT-2
	Severn A, Samavati F, Costa Sousa M. (2006). Transformation Strokes. 3rd Eurographics Workshop on Sketch-based Interfaces and Modeling (SBIM '06), pp. 75 - 81. Vienna, Austria, 2006/09.	➤ Collaborative project ➤ DOI link
14.	Streit et al. '06	IVC / RT-2
	Streit L*, Lapides P*, Costa Sousa M, Sharlin E. (2006). Modeling Plant Variations through 3D Interactive Sketches. 3rd Eurographics Workshop on Sketch-based Interfaces and Modeling (SBIM '06), pp. 99 - 106. Vienna, Austria, 2006/09.	➤ Collaborative project ➤ Supv (Lapides, MSc): Sharlin / Costa Sousa ➤ Supv (Streit, PDF): Costa Sousa ➤ DOI link

15.	Taerum et al. '06	IVC / RT-3
	Taerum T*, Costa Sousa M, Samavati F, Chan S, Mitchell JR. (2006). Real-Time Super Resolution Contextual Close-up of Clinical Volumetric Data. 17th Eurographics/IEEE-VGTC Symposium on Visualization (EuroVis '06), pp. 347 - 354. Lisbon, Portugal, 2006/05.	<ul style="list-style-type: none"> ➤ Thesis of Taerum (MSc) ➤ Supv: Costa Sousa / Samavati ➤ Patent: US7893940 B2 ➤ DOI link
16.	Viola & Costa Sousa '06	IVC / RT-3
	Viola I, Costa Sousa M. (2006). Focus of Attention + Context and Smart Visibility in Visualization. SIGGRAPH 2006, Course #6 - Illustrative Visualization for Medicine and Science. Boston, MA, USA, 2006/08.	<ul style="list-style-type: none"> ➤ Conference course [Ebert & Costa Sousa '06] (Sec. 2) ➤ DOI link

2005 [16 entries]

1.	Cherlin et al. '05	IVC / RT-2
	Cherlin J*, Samavati F, Costa Sousa M, Jorge JA. (2005). Sketch-based Modeling with Few Strokes. 21st ACM Spring Conference on Computer Graphics (SCCG '05) pp. 137 - 145. Budmerice, Slovakia, 2005/05.	<ul style="list-style-type: none"> ➤ Thesis of Cherlin (MSc) ➤ Supv: Costa Sousa / Samavati ➤ DOI link
2.	Costa Sousa '05a	IVC / RT-3
	Costa Sousa M. (2005a). Visualization Tools for the Science Illustrators: Evaluations and Requirements. IEEE Visualization (Vis '05), <i>Tutorial #5 - Illustrative Visualization</i> . Minneapolis, MN, USA, 2005/10.	<ul style="list-style-type: none"> ➤ Conference tutorial [Viola et al. '05] (Sec. 2) ➤ DOI link
3.	Costa Sousa '05b	IVC / RT-3
	Costa Sousa M. (2005b). Visualization Tools for the Science Illustrators: Evaluations and Requirements. SIGGRAPH 2005, Course 31 - Computer-Generated Medical, Technical, and Scientific Illustration. Los Angeles, CA, USA, 2005/08.	<ul style="list-style-type: none"> ➤ Conference course [Ebert & Costa Sousa '05] (Sec. 2)
4.	Costa Sousa '05c	IVC / RT-1
	Costa Sousa M. (2005c). NPR Systems for Technical and Science Subjects. SIGGRAPH 2005, Course 31 - Computer-Generated Medical, Technical, and Scientific Illustration. Los Angeles, CA, USA, 2005/08.	<ul style="list-style-type: none"> ➤ Conference course [Ebert & Costa Sousa '05] (Sec. 2)
5.	Costa Sousa et al. '05a	IVC / RT-3
	Costa Sousa M, Gooch A, Gooch B. (2005). Illustrative Scientific Visualization Framework. First Eurographics Workshop on Computational Aesthetics in Graphics, Visualization and Imaging (CAe '05), pp. 57 -65. Girona, Spain, 2005/05.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ DOI link

6.	Costa Sousa et al. '05b	IVC / RT-3
	Costa Sousa M, Ebert DS, Stredney D, Svakhine NA. (2005). Illustrative Visualization for Medical Training. <i>First Eurographics Workshop on Computational Aesthetics in Graphics, Visualization and Imaging</i> (CAe '05), pp. 201 - 208. Girona, Spain, 2005/05.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ DOI link
7.	Costa Sousa et al. '05c	IVC / RT-1
	Costa Sousa M, Samavati F, Taerum T.* (2005c). Precise Ink Drawing System. <i>SIGGRAPH 2005, Course 31 - Computer-Generated Medical, Technical, and Scientific Illustration</i> . Los Angeles, CA, USA, 2005/08.	<ul style="list-style-type: none"> ➤ Conference course [Ebert & Costa Sousa '05] (Sec. 2) ➤ Supv (Taerum, MSc): Costa Sousa / Samavati
8.	Ebert et al. '05	IVC / RT-3
	Ebert DS, Costa Sousa M, Gooch A, Stredney D. (2005). Computer-Generated Medical, Technical, and Scientific Illustration. <i>SIGGRAPH 2005, Course 31 - Computer-Generated Medical, Technical, and Scientific Illustration</i> . Article 1. Los Angeles, CA, USA, 2005/08.	<ul style="list-style-type: none"> ➤ Conference course [Ebert & Costa Sousa '05] (Sec. 2) ➤ DOI link
9.	Foster et al. '05	IVC / RT-1
	Foster K*, Jepp P*, Wyvill B, Costa Sousa M, Galbraith C, Jorge JA. (2005). Pen-and-Ink for BlobTree Implicit Models. <i>Computer Graphics Forum</i> (Eurographics '05 Issue), 24(3): 267-276. 2005/09.	<ul style="list-style-type: none"> ➤ Thesis of Foster (MSc) ➤ Supv: Costa Sousa / Wyvill ➤ Journal article @ Conference issue ➤ DOI link
10.	Isenberg et al. '05	IVC / RT-1
	Isenberg T, Carpendale S, Costa Sousa M. (2005). Breaking the Pixel Barrier. <i>First Eurographics Workshop on Computational Aesthetics in Graphics, Visualization and Imaging</i> (CAe '05), pp. 41--48. Girona, Spain, 2005/05.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ DOI link
11.	Olsen et al. '05	IVC / RT-2
	Olsen L*, Samavati F, Costa Sousa M, Jorge JA. (2005). Sketch-based Mesh Augmentation. <i>2nd Eurographics Workshop on Sketch-based Interfaces and Modeling</i> (SBIM '05), pp. 1 - 10. Vienna, Austria, 2005/09.	<ul style="list-style-type: none"> ➤ Thesis of Olsen (MSc) ➤ Supv: Samavati / Costa Sousa ➤ DOI link
12.	Schmidt et al. '05a	IVC / RT-2
	Schmidt R, Wyvill B, Costa Sousa M, Jorge JA. (2005a). ShapeShop: Sketch-Based Solid Modeling with BlobTrees. <i>2nd Eurographics Workshop on Sketch-based Interfaces and Modeling</i> (SBIM '05). Vienna, Austria, 2005/09.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ DOI link
13.	Schmidt et al. '05b	IVC / RT-2
	Schmidt R, Wyvill B, Costa Sousa M. (2005b). Sketch-Based Modeling with the BlobTree. <i>SIGGRAPH '05 – 'Technical Sketches'</i> , Article 90. Los Angeles, CA, USA, 2005/07-08.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ DOI link

14.	Sharlin & Costa Sousa '05	IVC / RT-5
	Sharlin E, Costa Sousa M. (2005). Drawing in Space using the 3D Tractus. 2nd IEEE VR 2005 Workshop on New Directions in 3D User Interfaces – Session 1: Input Devices. pp. 19- 22. Bonn, Germany, 2005/03.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ DOI link
15.	Streit et al. '05	IVC / RT-4
	Streit L*, Federl P, Costa Sousa M. (2005). Modelling Plant Variation through Growth. Computer Graphics Forum (Eurographics '05 Issue), 24(3): 497-506. 2005/09.	<ul style="list-style-type: none"> ➤ Rsrch of Streit (PDF) ➤ Supv: Costa Sousa ➤ Journal article @ Conference issue ➤ DOI link
16.	Wyvill et al. '05	IVC / RT-2
	Wyvill B, Foster K*, Jepp P*, Schmidt R, Costa Sousa M, Jorge JA. (2005). Sketch Based Construction and Rendering of Implicit Models. First Eurographics Workshop on Computational Aesthetics in Graphics, Visualization and Imaging (CAe '05), pp. 67 -74. Girona, Spain, 2005/01.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ Supv (Foster, MSc): Costa Sousa / Wyvill ➤ Supv (Jepp, PDF): Wyvill / Costa Sousa ➤ DOI link

2004 [4 entries]

1.	Brosz et al. '04	IVC / RT-1
	Brosz J*, Samavati F, Costa Sousa M. (2004). Silhouette Rendering Based on Stability Measurement. 20th ACM Spring Conference on Computer Graphics (SCCG '04), pp. 157 - 167. Budmerice, Slovakia, 2004/04.	<ul style="list-style-type: none"> ➤ Thesis of Brosz (MSc) ➤ Supv: Samavati / Costa Sousa ➤ DOI link
2.	Buchin et al. '04	GPE / RT-1
	Buchin K, Costa Sousa M, Doellner J, Samavati F, Walther M. (2004). Illustrating Terrains using Direction of Slope and Lighting. 4th ICA Mountain Cartography Workshop (MCW '04). Vall de Núria, Catalonia, Spain. 2004/01.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ Supv (Buchin & Walther, VR): Costa Sousa ➤ DOI link
3.	Costa Sousa et al. '04	IVC / RT-1
	Costa Sousa M, Samavati F, Brunn. M.* (2004). Depicting Shape Features with Directional Strokes and Spotlighting. Computer Graphics International (CGI '04), pp. 214 - 221. Crete, Greece, 2004/06.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ Supv HQP (Brunn, MSc): Costa Sousa / Samavati ➤ DOI link
4.	Foster et al. '04	IVC / RT-1
	Foster K*, Costa Sousa M, Samavati F, Wyvill B. (2004). Reverse Subdivision Multiresolution for Polygonal Silhouette Error Correction. 4th Intl. Workshop on Computational Geometry and Applications (CGA '04), pp. 247 - 256. Assisi, Italy, 2003/05.	<ul style="list-style-type: none"> ➤ Thesis of Foster (MSc) ➤ Supv: Costa Sousa / Wyvill ➤ DOI link

2003 [6 entries]

1.	Costa Sousa '03a	IVC / RT-1
	Costa Sousa M. (2003a). Indexed Taxonomies of Non-Photorealistic Rendering. <i>SIGGRAPH 2003, Course 10 - Theory and Practice of Non-Photorealistic Graphics: Algorithms, Methods, and Production Systems</i> . Los Angeles, CA, USA, 2003/07.	➤ Conference course [Costa Sousa '03] (Sec. 2)
2.	Costa Sousa '03b	IVC / RT-1
	Costa Sousa M. (2003b). Scientific Illustration – Part 1: Traditional Techniques and NPR Approaches. <i>SIGGRAPH 2003, Course 10 - Theory and Practice of Non-Photorealistic Graphics: Algorithms, Methods, and Production Systems</i> . Los Angeles, CA, USA, 2003/07.	➤ Conference course [Costa Sousa '03] (Sec. 2)
3.	Costa Sousa & Prusinkiewicz '03	IVC / RT-1
	Costa Sousa M, Prusinkiewicz P. (2003). A Few Good Lines: Suggestive Drawing of 3D Models. <i>Computer Graphics Forum</i> (Eurographics '03 Issue), 22(3): 327 - 340. 2003/09.	➤ Collaborative project ➤ Journal article @ Conference issue ➤ DOI link
4.	Costa Sousa et al. '03	IVC / RT-1
	Costa Sousa M, Foster K*, Wyvill B, Samavati F. (2003). Precise Ink Drawing of 3D Models. <i>Computer Graphics Forum</i> (Eurographics '03 Issue), 22(3): 369 - 379. 2003/09.	➤ Collaborative project ➤ Supv HQP (Foster, MSc): Costa Sousa / Wyvill ➤ Journal article @ Conference issue ➤ DOI link
5.	Costa Sousa & Gooch '03	IVC / RT-1
	Costa Sousa M, Gooch B. (2003). Composition: Basic Principles and NPR Techniques. <i>SIGGRAPH 2003, Course 10 - Theory and Practice of Non-Photorealistic Graphics: Algorithms, Methods, and Production Systems</i> . Los Angeles, CA, USA, 2003/07.	➤ Conference course [Costa Sousa '03] (Sec. 2)
6.	Gooch & Costa Sousa '03	IVC / RT-1
	Gooch B, Costa Sousa M. (2003). Artistic Composition for Computer Graphics. <i>SIGGRAPH 2003, Course 10 - Theory and Practice of Non-Photorealistic Graphics: Algorithms, Methods, and Production Systems</i> . Los Angeles, CA, USA, 2003/07.	➤ Conference course [Costa Sousa '03] (Sec. 2)

5.4.1.3. 1992 – 2000 (MSc, PhD)

2000 [1 entry]

1.	Buchanan & Costa Sousa '00	IVC / RT-1
	Buchanan J, Costa Sousa M. (2000). The Edge Buffer: A Data Structure for Easy Silhouette Rendering. <i>First Intl. Symposium on Non-Photorealistic Animation and Rendering</i> (NPAR '00), pp. 39 - 42. Annecy, France, 2000/06.	<ul style="list-style-type: none"> ➤ Collaborative project ➤ First conference paper after my PhD (1999) ➤ Buchanan, my PhD supv ➤ DOI link

1999 [2 entries]

1.	Costa Sousa & Buchanan '99a	IVC / RT-1
	Costa Sousa M, Buchanan J. (1999a). Computer-Generated Graphite Pencil Rendering of 3D Polygonal Models. <i>Computer Graphics Forum. Eurographics '99 Issue</i> . 18(3): 195-207. 1999/09.	<ul style="list-style-type: none"> ➤ Related to my PhD Thesis ➤ Supv: Buchanan ➤ Journal article @ Conference issue ➤ DOI link
2.	Costa Sousa & Buchanan '99b	IVC / RT-1
	Costa Sousa M, Buchanan J. (1999b). Observational Model of Blenders and Erasers in Computer-Generated Pencil Rendering. <i>Graphics Interface 1999</i> (GI '99), pp. 157 - 166. Kingston, ON, Canada. 1999/06.	<ul style="list-style-type: none"> ➤ Related to my PhD Thesis ➤ Supv: Buchanan ➤ DOI link

1994 [1 entry]

1.	Costa Sousa & Miranda-Filho '94	GPE / RT-3
	Costa Sousa M, Miranda-Filho DN. (1994). 3D Scientific Visualization of Reservoir Simulation Post-Processing. <i>SPE 9th Petroleum Computer Conference</i> (SPE-PCC '94), 255 - 264. Dallas, TX, USA. 1994/07-08.	<ul style="list-style-type: none"> ➤ Related to my MSc Thesis ➤ Industry collab.: Miranda-Filho ➤ DOI link

1993 [1 entry]

1.	Costa Sousa '93	IVC / RT-3
	Costa Sousa M. (1993). 3D Reservoir Visualization Using PHIGS and GL. <i>6th Brazilian Symposium on Computer Graphics and Image Processing</i> (SIBGRAPI '93), pp. 99 - 102 (in Portuguese). Recife, PE, Brazil, 1993/10.	<ul style="list-style-type: none"> ➤ Related to my MSc Thesis ➤ PDF link