Alexei Sorin
List of Publications
(in chronological order, starting with the most recent)

Journal Papers

1. Wang H. and Sourin A. (2025) Sound Signatures for Images and Geometric Shapes, *The Visual Computer*, Springer, 2025.
2. Wang H. and Sourin A. (2025) Visual Signatures for Music Mood and Timbre, *The Visual Computer*, Springer, v. 41. 2065-2077, 2025.
3. Zhang C., Dai W., Isoni V. Sourin A. (2023) Automated Anomaly Detection on the Surfaces by Dual Generative Networks with Limited Training Data, *IEEE Transactions on Industrial Informatics,* v. 20, 1, 421-431.
4. Ihar Volkau, Abdul Mujeeb, Wenting Dai, Marius Erdt, Alexei Sourin, (2022) The Impact of a Number of Samples on Unsupervised Feature Extraction, Based on Deep Learning for Detection Defects in Printed Circuit Boards, *Future Internet* 2022, MDPI, 14, 8, 1-17.
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6. Dai W., Erdt M., Sourin A. (2021) Detection and Segmentation of Image Anomalies based on Unsupervised Defect Reparation. *The Visual Computer, Springer*, 37, 3093-3101.
7. Chegini M., Bernard J., Cui J., Chegini F., Sourin A., Andrews K., Schreck T. (2020). Interactive Visual Labelling versus Active Learning: An Experimental, Comparison. *Frontiers of Information Technology & Electronic Engineering*, Springer.
8. Dai W., Mujeeb A., Erdt M., Sourin A. (2020). Soldering Defect Detection in Automatic Optical Inspection, *Advanced Engineering Informatics*, Elsevier, 43: 101004, 2020.
9. Mujeeb A., Dai W., Erdt M., Sourin A. (2019). One Class Based Feature Learning Approach for Defect Detection Using Deep Autoencoders. *Advanced Engineering Information*, Elsevier, 42: 100933, 2019.
10. Cui J., Sourin A. (2018). Mid-air Interaction with Optical Tracking for 3D Modeling, *Computers & Graphics*, Elsevier, v. 74, August, 1-11,
11. Koa M.D., Johan H., Sourin A. (2018). Interactive Rendering of Translucent Materials under Area Lights using Voxels and Poisson Disk Samples, *Computers & Graphics*, Elsevier, 71(1): 101-112.
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17. Sourin A., Earnshaw R., Gavlilova M., Sourina O. (2016) Problems of Human-Computer Interaction in Cyberworlds. Transactions on Computational Science, Springer *Transactions on Computational Scienc*e XXVIII, pp.1-22.
18. Rasool S., Sourin A. (2016) Real-time haptic interaction with RGBD video streams. *The Visual Computer*, Springer, 2016, v.32, 1311-1321.

19. Edelsbrunner J., Krispel U., Havemann S., Sourin A., and Fellner D.W. (2016) Constructive Roofs from Solid Building Primitives. *Transactions on Computational Science*, Journal Subline, XXVI, LNCS 9550, pp. 17-40.

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5. Sourin AI. (1986) Computer Graphics in Physics of Solid Body Data Processing. *Changing of A15 Superconductive Substance Properties under Radiation*, Energoatomizdat, Russia, pp. 111-117 (in Russian).

Edited Books

1. Mengqiang Wei, Alexei Sourin, Zehua Chen, Olga Sourina, Lin Shang (2025), *Proceedings 2025 International Conference on Cyberworlds*. IEEE CS.
2. Najoua Essoukri Ben Amara, Alexei Sourin, Olga Sourina, Christophe Rosenberger 2023), *Proceedings 2023 International Conference on Cyberworlds*. IEEE CS.
3. Takeshima Y., Sourin A., X, Rosenberger C., Sourina O., Miyata K. (2022) *Proceedings 2022 International Conference on Cyberworlds*. IEEE CS.
4. Sourin A., Rosenberger C., Sourina O. (2021) *Proceedings 2021 International Conference on Cyberworlds*. IEEE CS.
5. Sourin A., Charier C., Rosenberger C., Sourina O. (2020) *Proceedings 2020 International Conference on Cyberworlds*. IEEE CS.
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3. Wang H. and Sourin A. (2024) An Objective Metric Towards Music Mood Visualization. The 2024 International Conference on Cyberworlds, Yamanashi, Japan, 29-31 Oct 2024, IEEE CPS, 130-137.
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12. How RTK and Sourin A. (2021) Generation of Music with Dynamics using Deep Learning. The 2021 International Conference on Cyberworlds, Caen France, 28-30 Sept 2021, IEEE CPS, 137-140, 2021.
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