Themenliste / list of topics, Seminar Computergrafik, Winter 2026/2027

3D data acquisition and analysis

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Morales, Aidan & MacFarlane, David W. (2025):
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Hackenberg, Jan & Bontemps, Jean-Daniel (2023):
Improving quantitative structure models with filters based on allometric scaling theory.
Applied Geomatics 15, 1019-1029.
https://link.springer.com/article/10.1007/s12518-023-00537-4

3.
Ferraro, Pascal & Godin, Christophe (2000):
A distance measure between plant architectures.
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Ikusaka, Y.; Pratama, Y. Kushida, T.; Fujimura, Y.; Tanaka, K.; Funatomi, T. & Mukaigawa, Y. (2025):
Time-resolved inverse radiosity: simultaneous estimation of shape and reflectance.
Optics Express, vol. 33, issue 16, pp. 34448-34464.
https://opg.optica.org/oe/fulltext.cfm?uri=oe-33-16-34448

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Ye, Mingqiao; Danelljan, Martin; Yu, Fisher & Ke, Lei (2024):
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Modelling and rendering of vegetation

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Sato, Hisashi (2026):
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Liu, Liyuan; Liu, Ning; Xie, Haoran & Hu, Shaojun (2026):
VegMRFP: Mixed radiance field primitives for vegetation rendering and reconstruction.
Computers & Graphics 138, 104650.
https://www.sciencedirect.com/science/article/pii/S0097849326001214?casa_token=ZtdrE-Ah3XgAAAAA:kTvAPoRRid-wkI9wnV8D6NMtydSc3CZlYsRWPu6pbYRB-Cdv6Z0foMo_6zAjkSJeKRDAFEvHdA

9.
Hu, Chengsong; Thomasson, J. Alex; Reberg-Horton, Chris; Mirsky, Steven B. & Bagavathiannan, Muthukumar V. (2022):
Modeling realistic 3D agricultural vegetations using photometric-based approach and its application to weed detection.
Computers and Electronics in Agriculture 198, 107020.
https://papers.ssrn.com/sol3/Delivery.cfm/ed5f7ca9-fa02-429b-995d-9b4811361e54-MECA.pdf?abstractid=4001357&mirid=1

Landscape rendering

10.
Rammer, W.; Guérin, Eric; Marais, Patrick; Peytavie, Adrien; Kapp, Konrad; Galin, Eric; Seidl, Rupert & Gain, James (2026):
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https://nsojournals.onlinelibrary.wiley.com/doi/pdfdirect/10.1002/ecog.08198