Marc JAEGER

Professional Contact
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http://agents.cirad.fr/index.php/Marc+Jaeger
French citizen. Born September 7th, 1962.

Current position

Senior Researcher at CIRAD AMAP Unit, Project GreenLab AMAP Animator, I2P (Imagery for Plants and Landscapes) team
Associate Researcher of Montpellier University LIRMM ICAR team

Main research and development topics

Computer graphics (Natural Phenomena)

- Level of Detail, level of vision BREP geometrical models (ramified objects and spare objects)
- Fast rendering of natural complex scenes
- Landscape simulations (water cycle and plant functional simulations)
- Volume rendering and reconstruction. Solid characterisation, statistical analysis (past activities)

Applications (Software developments in the frame of GreenLab, Digiplante and Amap projects)

- Dissemination on Plant growth models (animation, elearning...)
- Simulated Plants, Stand, crops, landscape simulation and visualisation
- Rendering and natural phenomena effects on landscape scenes (shadows, fog, snow, ...)
- 3D image reconstruction and image analysis of vegetal tissues (roots) from microscopic slices
- Landscape evolution simulation, based on vegetation growth and water cycle simulation

IEEE member since 2000

Latests Publications

Journals (2016-2018)

- Tondjo, K., Brancheriau, L., Sabatier, S., Kokutse, A.D., Kokou, K., Jaeger, M., de Reffye, P., Fourcaud, T. , 2018. Stochastic modelling of tree architecture and biomass allocation: application to Teak (Tectona grandis L. f.), a tree species with polycyclic growth and leaf neoformation. Accepted to Annals of Botany, 2018
- Zang, X.-P., Bao, G.-B., Meng, W.-L., Jaeger, M., Li, H.-J., Deussen, O., and Chen, B.-Q., 2017. Tree Branch Level of Detail Models for Forest Navigation. Computer Graphics Forum, 2017, DOI: 10.1111/cgf.130 http://onlinelibrary.wiley.com/doi/10.1111/cgf.13088/full

Books (2016-2018)

- de Reffye, P., Jaeger, M., Barthélémy, D., Houllier, F., coordinateurs. 2018. Modélisations de l'architecture et de la croissance des plantes. Editions QUAE. 2018 *Under Press*
- de Reffye, P., Jaeger, M., Barthélémy, D., Houllier, F., coordinateurs. 2016. Architecture et croissance des plantes. Modélisations et applications. Editions QUAE. ISBN : 978-2-7592-2622-1 (ebook) http://www.quae.com/fr/r5053-architecture-et-croissance-des-plantes.html

Book Chapters (2016-2018)

- de Reffye, P., Jaeger, M., Mathieu, A., 2018. Applications diverses de l'architecture des plantes. In: de Reffye, P., Jaeger, M., Barthélémy, D., Houllier, F., coordinateurs. 2018. Modélisations de l'architecture et de la croissance des plantes. Editions QUAE. 2018 *Under Press*
- Jaeger, M., 2016. Calibration, implémentation et mise en oeuvre du modèle GreenLab. In: de Reffye, P., Jaeger, M., Barthélémy, D., Houllier, F., coordinateurs. 2016. Architecture et croissance des plantes. Editions QUAE. ISBN : 978-2-7592-2622-1 (ebook)
- Jaeger, M., Subsol, G., 2016. Modèles pour la représentation et la visualisation des plantes et des paysages. In: de Reffye, P., Jaeger, M., Barthélémy, D., Houllier, F., coordinateurs. 2016. Architecture et croissance des plantes. Editions QUAE. ISBN : 978-2-7592-2622-1 (ebook)
- de Reffye, P., Jaeger, M., 2016. Applications diverses de l'architecture des plantes. In: de Reffye, P., Jaeger, M., Barthélémy, D., Houllier, F., coordinateurs. 2016. Architecture et croissance des plantes. Editions QUAE. ISBN : 978-2-7592-2622-1 (ebook)

Conferences (international with proceedings, 2016-2017)

- Jaeger, M., de Reffye, P., Sabatier, S., Letort - Le Chevalier, V., Heuvelink, E., Caraglio, Y., Motisi, N., Krit, H., Lafond, M.-H., Kang, M.-G., Zhang, B.-G. 2016. Plant growth architecture and production dynamics : A set of e-learning resources. 2016 IEEE International Conference on Functional-Structural Plant Growth Modeling, Simulation, Visualization and Applications (FSPMA), Qingdao, China, 2016, pp. 83-89. doi: 10.1109/FSPMA.2016.7818292
- Kang, M.-G., de Reffye, P., Hua, J., Jaeger, M. 2016. Parameter identification of plant growth models with stochastic development. 2016 IEEE International Conference on Functional-Structural Plant Growth Modeling, Simulation, Visualization and Applications (FSPMA), Qingdao, China, 2016, pp. 98-105. doi: 10.1109/FSPMA.2016.7818294

Others (2016-2018)

Report.

- Jaeger, M., de Reffye, P., 2018. Modélisation et simulation de la croissance des plantes : un système dynamique et complexe. Contribution au dossier systèmes complexes d'Agropolis International. Under Press

Web sites :Conception and development

- GreenLab web site: http://greenlab.cirad.fr/
- Greenlab Online Courses : http://greenlab.cirad.fr/GLUVED/

Communications - Invited Talks (2016-2018)

- Fourcaud, T., Erktan, A., Millan, M., Bouchet, D., Laurans, M., Dinouard, P., Jaeger, M., 2016. Characterisation and visualisation of plant community structure and temporal dynamics along Mediterranean terrestrial transport infrastructures: the project TAFER. Communication at IEEE International Conference on Functional-Structural Plant Growth Modeling, Simulation, Visualization and Applications (FSPMA 2016), 7-11 November 2016, QingDao, China
- Jaeger, M. de Reffye, P. Sylvie Sabatier, S., Letort - Le Chevalier, V., Heuvelink, E, Caraglio, Y., Motisi N., Krit, H., Lafond, M-H., Kang, M.-Z., Zhang, B.-G. 2016. Plant growth architecture and production dynamics: A set of e-learning resources. Poster at IEEE International Conference on Functional-Structural Plant Growth Modeling, Simulation, Visualization and Applications (FSPMA 2016), 7-11 November 2016, QingDao, China
- de Reffye, P., Taugourdeau,O., Jaeger, M. 2016. Efficient structure development operators, application to mature tree structure simulations. Poster at IEEE International Conference on Functional-Structural Plant Growth Modeling, Simulation, Visualization and Applications (FSPMA 2016), 7-11 November 2016, QingDao, China

Education

- Dec. 2010. Habilitation à diriger des Recherches (Computer Sciences). University Blaise Pascal, Clermont-Ferrand II
- Dec. 1987. PhD thesis in Computer Science, University of Strasbourg
- Sep. 1985. D.E.A. (master degree) in Computer Science, University of Strasbourg
- June 1984. Master in Computer Sciences applied to Management (MIAGE, MST), University of Mulhouse
- June 1980. Baccalauréat C (Mathematics), Lycée Bartholdi, Colmar

Past positions

- Nov. 2006 - Nov. 2008. Engineer Specialist at INRIA Saclay, EPI DigiPlante Team (INRIA / Ecole Centrale Paris CIRAD)
- July 2006 - Oct. 2006. Senior Researcher at CIRAD-AMAP (UMR AMAP, Cirad/Inra/Cnrs/Montpellier Univ. II/ IRD)

- Jan. 2002 - Jan. 2006. French Director of LIAMA (Beijing - PR CHINA)
- Jan. 2002 - June 2006. Guest Professor of Chinese Academy of Sciences. Beijing Information Sciences and Technology Graduate School (Master level)
- Aug. 2001 - July 2006. Senior Researcher in LIAMA (Beijing - PR CHINA)
- June 1999 - July 2001. Scientific Direction of CIRAD. Research co-ordinator in charge of Applied Mathematics and Computer sciences
- Jan. 1991 - June 1999. CIRAD/AMAP: Head of the MEB-C2000 Team (Volume imaging: with medical, forestry, agro-production applications)
- Jan. 1989 - Dec 1990. Research Engineer at CIRAD-AMAP. Plants simulation and landscape design and visualisation
- Jan. 1988 - Dec 1988. National service. EELAT helicopter school. Analysis/Development of E-learning and 3D simulators systems
- Feb. 1984 - Dec 1987. Research fellowship at CIRAD (plant growth simulation and visualisation, Master 2/PhD)
- Jan. 1983 - Sep. 1983. Information Sciences in Management: Analyse, conception and development Beghin Say SA. (extended MST Master internship)

Teaching activities.

- 2002->2006. Computer Graphics and applications in life sciences. Master Course. CAS. IST Graduate School. Beijing. Contents: Elements of computer graphics: 28 hours (12 hours practice); Natural phenomena. 6 hours (3 hours practice); Volume imaging. 6 hours (3 hours practice)
- 2003,2004. Basic Elements of Computer Graphics. Natural Phenomena, virtual plants and Landscapes. Ecole Centrale de Paris, 6 hours
- 2001. Symposium Workshop (Ecole chercheur INRA-CIRAD). An introduction to Volumic imaging and its applications. June 2001, 25-28th. Montpellier
- 1997->2001. Computer graphics. Basic elements of C.G. 40 hours course. EMA/EERIE Institute (Ecole pour les Etudes et la Recherche en Informatique et Electronique de Nîmes, Ecole des Mines d'Alès). CG Modelling, Visualisation, Rendering, Animation
- 1998, 1999, 2000. Conferences on "Modelling and visualisation of Natural Phenomena" at LIGIM (Laboratoire d'Informatique Graphique et d'Imagerie Numérique de l'Université Claude Bernard, Lyon), LIRMM (Laboratoire d'Informatique de Robotique et de Micro-électronique de Montpellier, Université des Sciences et Techniques du Languedoc)
- 1995,1999. Conferences on Medical Imaging and its applications for Biometry, geometrical modelling, Computer prosthesis design at Faculty of Medecine of Montpellier and Faculty of Dentistry of Toulouse

Ph.D. Students

- Guilhem Brunel, University of Montpellier 2, Automated Cell file detection in wood cross section images, 2011-2014
- HongJun Li, Beijing Forestry University and CASIA, 3D tree geometrical reconstructions from terrestrial laser scans, 2008-2012
- Vincent le Chevalier, Ecole Centrale de Paris, Functional Landscapes (Plant and crops models in interaction with water cycle models), 2006-2010
- Heaven Wu, China Agricultural University (CAU), 3D reconstruction of wheat roots from microscopic slices, 2005-2009
- QingQiong Deng, CASIA, Virtual plant foliage LOD and multiresolution models, 2004-2008.
- Chao Zhu, CASIA, Defining tree crown geometry from point clouds, 2006-2010
- Mei Xing, CASIA, Landscape visualisation and rendering, 2004-2006
- Teng Jun, CASIA, GPU based Multilevel Plants and tree visualisation, 2002-2007
- ZhiFeng Cai, CASIA, Image Registration with non linear elastic models, 2000-2004
- Stéphane Chemouny, Univ. Montpellier II, 3D non linear image filtering, 1997-2001
- Frédéric Banégas, Ecole des Mines de St Etienne, 3D geometric solid characterisation, 1997-2000

Scientific animation

- 2012. Research, local authorities and industry exchanges on virtual reality applications for environment and sustainable planning, 40 participants, Montpellier May 2012
- 2005. GreenLab 2nd Workshop, 55 participants, Beijing June 2005
- 2004. GreenLab First Strategy Workshop, Beijing, 45 participants, October 2004
- 2003. Main board and Organiser of PMA03, The 2003' International symposium on plant growth models and their applications. Beijing, October 2003
- 2000,2001. Organiser of several scientific animations on: freeware, plant geometry, image processing, stem modeling, models in decision support tools (agronomy), software engineering.
- 2001. Organizer of the Volume Imaging School. June 25-28th, 2001, Montpellier

International events organisation

- 2010. Main board and Co-organiser of LandMod2010, the 2010 International Conference on Integrative Landscape Modelling. https://www.umr-lisah.fr/rtra-projects/landmod2010.html Proceedings: http://greenlab.cirad.fr/LandMod2010/ . Montpellier SupAgro, February 3-5, 2010
- 2009. Main board and Organiser of PMA09, The 2009' International symposium on plant growth models and their applications. http://pma.cirad.fr/PMA09/index.htm . November 2009, Beijing
- 2005. Organiser of STIC-ASIA 05 workshop October 24-26th 2005 in Beijing
- 2003. Main board and Organiser of PMA03, The 2003' International symposium on plant growth models and their applications. http://pma.cirad.fr/PMA03/index.htm . October 2003, Beijing

Committees, Event boards, positions

- Reviewer (2006->2017) for Annals of Botany, Journal of Computer Sciences and Techniques, Journal of Virtual Reality, Transaction on Graphics...
- Reviewer for Eurographics: EG02,EG03,EG05,EG06,EG08 for Siggraph:SIG06,SIG09 for CARI (2000,2004,2008,2010,2014)...
- Event Scientific Boards: PMA2018, VRCAI2016, FSPMA2016, VRCAI2015, VRCAI2013, PMA'12, Regio Resources 2011, Edutainment 2018, Edutainment 2016, Edutainment 2010, LandMod2010, Edutainment 2009 PMA09, Edutainment 2008, PMA06, PMA03
- Participation to LIAMA's Scientific Committee (2000 / 2001, acting F. Houllier, representing CIRAD)
- Expert Member of C2I2MEAD "Environment and sustainable development" certificate definition (MEN-MESR SG/STSI) 2007-2011
- Board member of the European Land-Use Institute in charge of technology and products 2010-2015
- Registered at Eu-Cordis expert database (IST priority, and Co-operation with Asia)
- Member of the Sino-French committee for the Sino-French Centre of Sciences and Technology (February-July 2001)
- IADIS (International Association for Development of the Information Society) member 2010-2012
- IEEE member 2000-2018

Research project co-ordination or major contribution

- Labex Agro 1600-027 Project. Co-ordinator. 2017. Architecture et croissance des plantes. Modélisation et applications.(Book and e-book edition)
- UVED GreenLab Project. Co-ordinator. 2013->2015. Understanding, modeling and simulating plant dynamics. (Numerical teaching resources for)
- Fondation RTRA (Computational Plants and eco-systems) 0902-016 Project. Co-ordinator. 2009->2012. VLS-LRC Virtual Landscapes in Languedoc Roussillon and Catalogna. Thematic regional network dedicated to reinforce collaborative projects on virtual landscapes and eco-systems 3D visualisations.
- Fondation RTRA (Computational Plants and eco-systems) 0902-012 Project. Co-ordinator. 2009->2011. PMA09 third Interntional Symposium on Plant Growth Modeling, Simulation and Applications
- Fondation RTRA (Computational Plants and eco-systems) 0803-021 Project. 2008->2010. Co-ordinator. Integrative ecosystems & landscape modelling Model level integration for understanding and managing human influenced ecosystems at the landscape scale
- ANR/Bioenergies/Emerge, 2009->2013. Co-ordinator for Cirad Partner. Task 3. Volume imaging (CT scans)

and 3D reconstructions geometry analysis
- ANR/MMSA/Project Natsim 2006->2008. Co-ordinator of work-package 3. Virtual landscape rendering
- LIAMA 2001-08 Project. Advanced medical imaging methods for Hominid Morphology studies. French project co-ordinator. 2002-2003
- Co-ordinator of the CIRAD Research Initiative Action "Methods and Software Tools for Wood Resource Evaluation". 1999-2000
- National Project SICRODEF (Ademe funded, 1997-1999). 3D stem geometrical modelling, sawing simulation, adaptive 3D meshes for mechanics
- EU Fair CT 1915 project STUD (FP4, 1995-1999). Contributor to Work-package 5. Resource evaluation software development and 3D image processing research developments
- EU Fair PL project OAKKEY (FP4, 1994-1998). Co-ordinator of Work-package 4. 3D simulation and software developments
- Main contributor in several local projects with Montpellier Hospitals (1993-1998): Embryology, Liver oncology, Wrist and Foot biometry
- Main contributor in several local projects with University Paul Sabatier of Toulouse and Clinic Pasteur of Toulouse (1994-1998): 3D Cephalometry. Server application is installed in Toulouse (CNUT, 1996) with clients in Faculty of Dentistry and Odontology

Products. Transfer to Industry / Research and products for Industry

Transfer to Industry

- 2003,2004. Algorithms and applications (volume image processing and rendering). Supports to Technological transfer to Trigem-Ortho. Start-up in Cap Alpha, Montpellier
- 2003,2004. Algorithms and applications (volume image processing and rendering). Supports to Technological transfer to IntraSense, Montpellier
- 1984->1990. AMAP. Plant generator and Landscape renderer. Basis of the Data structure and algorithms of the commercial AMAP Range tools (Genesys(TM) and Orchestra(TM)); technological transfer to Bionatics SA. http:www.bionatics.com

Industry R&D projects:

- TALVEG-2 (2016, 2018). Supports in imagery in the frame of revegatalization studies and projects. Valorhiz, Montpellier
- EDF-R&D (2017). Bibliography and opportunuity study (imagery)
- EDF-R&D (2016). Preliminary study (imagery)
- TAFER (2013, 2016). Supports in imagery for roadslides and railway banks plant communities 3D visualizations. with the support of SYSTRA (Paris) and Labex Agro, Montpellier
- Lamalou (1997,1998). Design, definition and prototype realisation of a 3D prosthesis design tool. STER Clinic and AFSTR Association, Lamalou les Bains
- Echo 3D (1996-1998). Research and development. Conception, design, realisation, documentation. 4D Doppler US reconstruction and visualisation software tool to be integrated in a PACS. Medasys Digital Systems, Gif sur Yvette
- Carpo (1993->1997). Research and development. Fresh Mushroom X ray internal structure analyser. Conception, design, realisation and implementation of a complete solution (X-Ray devices, protocols, software, and teaching): X-ray image acquisition, film development and digitalization, image processing and registration, databases and embedded queries related to culture conditions, statistical analysis, and data management. France Champignon S.A., Beaufort en Vallée

Software registration.

- QIZPP (Qt Image Zbuffer Post Processing). Inter Deposit Digital Number (IDDN) registration at APP (Agence pour la Protection des Programmes). In progress Owner: CIRAD (member 88.75.673). June 2012
- GLOUPS (Generalized Operator for an Universal Plant Simulator). Inter Deposit Digital Number (IDDN) registration at APP (Agence pour la Protection des Programmes) under number no:

IDDN.FR.001.210033.000.R.P.2011.000.30010. Owner: CIRAD (member 88.75.673). Logibox : 66948, May 27th, 2011

Running projects:

- Labex Agro 1600-027 Project. Co-ordinator. 2017. Architecture et croissance des plantes. Modélisation et applications.(Book and e-book edition)
- Sino-French GreenLab project network (PI, co-director)
- TALVEG-2 (2016, 2018). Supports in imagery in the frame of revegatalization studies and projects. Valorhiz, Montpellier

MOU-Agreements

- 2005. Research co-operation MOU: Ecole Centrale de Paris - LIAMA
- 2005. Research co-operation MOU: INPT-LIAMA
- 2003. Research co-operation - industry agreement: Agreement France Telecom R&D - LIAMA
- 2003-2006: Negotiations, contracts/agreements between LIAMA and local partners: Tsinghua Press, French Embassy, Hotels, Air France

CDROM, Communication and WebSites

- CDROM. "Initiation span &eagrave; l'imagerie volumique". Courses, References, Tools. 2001
- CDROM. "Computer Graphics". Courses, Tools and References. 2003-2006 (annual update)
- Liama's Short news (200-2003). Designer and main redactor. http://pma.cirad.fr/LIAMA_COM/
- Web sites :Conception and development
  GreenLab web site: http://greenlab.cirad.fr/
  GreenLab Online Course site: http://greenlab.cirad.fr/GLUVED
  LandMod2010 Mirror site (with proceedings) http://greenlab.cirad.fr/LandMod2010/
  VLS_LRC project web site: http://pma.cirad.fr/VLS_LRC
  PMA09 International web site: http://pma.cirad.fr
  Personal page: http://agents.cirad.fr/index.php/Marc+Jaeger
  My "Best images" professional web site: http://marcjaeg.free.fr http://pma.cirad.fr/MJ_PICS/
  Liama's web site (Phase 3, Archive): http://pma.cirad.fr/LIAMA_V3
  Liama's Documents(2001->2006, Archive): http://pma.cirad.fr/LIAMA_COM
  PMA'03 International web site (Archive): http://pma.cirad.fr/PMA03
  GreenLab project web site: http://liama.ia.ac.cn/gl_index.htm
  CIRAD/Scientific delegation Applied Mathematics and Computer Sciences -MIA (Archive in French): http://pma.cirad.fr/DS_MIA/
  EEC project STUD site (Archive): http://pma.cirad.fr/FP5_STUD/
  CIRAD/AMAP MEB TEAM site (Archive in French): http://pma.cirad.fr/TEAM_MEB/

Languages:

- French (native)
- English
- German (spoken)
- Chinese (very basic notions, spoken)

References (List updated on 2018, February 28th)

Conferences (international with proceedings)

- Jaeger, M., de Reffye, P., Sabatier, S., Letort - Le Chevalier, V., Heuvelink, E., Caraglio, Y., Motisi,

N., Krit, H., Lafond, M.-H., Kang, M.-G., Zhang, B.-G. 2016. Plant growth architecture and production dynamics : A set of e-learning resources. 2016 IEEE International Conference on Functional-Structural Plant Growth Modeling, Simulation, Visualization and Applications (FSPMA), Qingdao, China, 2016, pp. 83-89. doi: 10.1109/FSPMA.2016.7818292

- Kang, M.-G., de Reffye, P., Hua, J., Jaeger, M. 2016. Parameter identification of plant growth models with stochastic development. 2016 IEEE International Conference on Functional-Structural Plant Growth Modeling, Simulation, Visualization and Applications (FSPMA), Qingdao, China, 2016, pp. 98-105. doi: 10.1109/FSPMA.2016.7818294
- Brunel, G., Borianne, P., Subsol, G., and Jaeger, M., 2013. Simple-graphs fusion in image mosaic. Application to automated cell files identification in wood slices. In Kämäräinen, J. K., Koskela M. (Eds) Image analysis : 18th Scandinavian Conference, SCIA 2013, Espoo, Finland, June 17-20, 2013. Proceedings. Berlin : Springer Verlag, 34-43 p. (Lecture notes in computer science, vol. Lecture notes in computer science)
- Brunel, G., Borianne, P., Subsol, G., Jaeger, M., and Caraglio, Y., 2013. Defining reliability coefficients in an automated method of identification and characterization of radial files in microscopic images of gymnosperms. In Nikinmaa, E., Nygren, P., Sievänen, R., Godin, C., Lintunen, A. (Eds) Proceedings of the 7th International Conference on Functional Structural Plant Models, Saariselka, Finland, 9-14 June 2013. Vantaa: Finnish Society of Forest Science, pp. 82-84
- Brunel, G., Borianne, P., Subsol, G., Jaeger, M., and Caraglio, Y., 2012. Automatic characterization of the cell organization in light microscopic images of wood: application to the identification of the cell file. In: Proccedings of Plant Growth Modeling, Simulation, Visualization and Applications (PMA12), Shanghai, 31 Oct. 3 Nov 2012. IEEE press. ISBN 978-1-4673-0070-4, pp. 58-65
- Jaeger, M., 2012. Enhancing computer generated natural scenes using quick and dirty image based recipes. In: Proccedings of Plant Growth Modeling, Simulation, Visualization and Applications (PMA12), Shanghai, 31 Oct. 3 Nov 2012. IEEE press. ISBN 978-1-4673-0070-4, pp. 164-171
- Bao, G.-B., Li, H.-J., Zhang, X.-P., Che, W.-J., and Jaeger, M., 2011. Realistic Real-time Rendering for Large-scale Forest Scenes. 1st International Symposium on VR innovation (ISVRI) 19-20 March, 2011, Singapore. pp 217-223. ISBN: 978-1-4577-0055-2.
  Url: http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?arnumber=5759637
- Li, H.-J., Zhang, X.-P., Jaeger, M., and Constant, T., 2010. Segmentation of Forest Terrain Laser Scan Data. VRCAI '10: Proceedings of the 9th ACM SIGGRAPH Conference on Virtual-Reality Continuum and its Applications in Industry ,Seoul, South Korea, 2010, Dec. 12-13. ACM New York, NY, USA. ISBN: 978-1-4503-0459-7, pp. 47-54.
  Url: http://doi.acm.org/10.1145/1900179.1900188
- Jaeger, M., Sun, R.-X., Jia, J.-Y., and Le Chevalier, V., 2010. Efficient virtual plant data structure for visualization and animation. In: Proceedings of IADIS International Conferences Computer Graphics, Visualization, Computer Vision and Image Processing 2010, MCCSIS 2010 Freiburg, Germany, July 27-29, ISBN 978-972-8939-22-9, 2010 IADIS, pp. 65-75
- Le Chevalier, Jaeger, M., 2010. Bottom-up approach of landscape simulation leading to a generic synchronization. LandMod 2010: International Conference on Integrative Landscape Modelling, Montpellier, February 3-5, 2010, France, ISBN 978-2-7592-0859-3, Quae editions, 8 p.
  Url: http://greenlab.cirad.fr/LandMod2010/exl-php/articles/648-article.htm
- Jaeger, M., Jia, J.-Y., Zhang, X.-P., and Griffon, S., 2010. VR Web based tree and vegetation representations for environmental applications and studies, an example on ChongMing Island. LandMod 2010: International Conference on Integrative Landscape Modelling, Montpellier, February 3-5, 2010, France, ISBN 978-2-7592-0859-3, Quae editions, 8 p.
  Url: http://greenlab.cirad.fr/LandMod2010/exl-php/articles/634-article.htm
- Cournède, P.-H., Guyard, T., Bayol, B., Griffon, S., de Coligny, F., Borianne, P., Jaeger, M., and de Reffye, P., 2009. A Forest Growth Simulator Based on Fonctional-Structural Modelling of Individual Trees. In: Li, B. and Jaeger, M. and Guo, Y. (Eds). 2010. Proceedings of Plant growth Modeling, and their Applications (PMA09), Beijing, China, November 9-13, 2009, IEEE CPS, pp. 34-41
- Bao, G.-B., Zhang, X.-P., Che, W.-J., and Jaeger, M., 2009. Billboards for Tree Simplification and Real-time Forest Rendering. In: Li, B. and Jaeger, M. and Guo, Y. (Eds). 2010. Proceedings of Plant growth Modeling, and their Applications (PMA09), Beijing, China, November 9-13, 2009, IEEE

CPS, pp. 433-440
- Zhu, C., Zhang, X.-P., and Jaeger, M., 2009. New Method for Construction of Tree Crown from Scanned Data. In: Li, B. and Jaeger, M. and Guo, Y. (Eds). 2010. Proceedings of Plant growth Modeling, and their Applications (PMA09), Beijing, China, November 9-13, 2009, IEEE CPS, pp. 352-359
- Le Chevalier, V., Jaeger, M., and Cournède, P.-H., 2009. Synchronisation Formalism, Resource and Plant Models for Plant Ecosystem Simulation. In: Li, B. and Jaeger, M. and Guo, Y. (Eds). 2010. Proceedings of Plant growth Modeling, and their Applications (PMA09), Beijing, China, November 9-13, 2009, IEEE CPS, pp. 277-284
- Wu, H.-W., Jaeger, M., Wang, M., Li, B.-G., and Zhang, B-G., 2009. 3D-Reconstruction and Visualization of Xylem Vessels of Wheat Nodal Root. In: Li, B. and Jaeger, M. and Guo, Y. (Eds). 2010. Proceedings of Plant growth Modeling, and their Applications (PMA09), Beijing, China, November 9-13, 2009, IEEE CPS, pp. 384-390
- Li, H.-J., Zhang, X.-P., Che, W.-J., and Jaeger, M., 2009. Smooth Transition between Different Plant Leaves Models. In: Li, B. and Jaeger, M. and Guo, Y. (Eds). 2010. Proceedings of Plant growth Modeling, and their Applications (PMA09), Beijing, China, November 9-13, 2009, IEEE CPS, pp. 376-383
- Sun, R.-X., Jia, J.-Y., Li, H.-Y., and Jaeger, M., 2009. Image-based Lightweight Tree Modeling. In: Proceedings of the 8th international Conference on Virtual Reality Continuum and Its Applications in industry (Yokohama, Japan, December 14 - 15, 2009). S. N. Spencer, Ed. VRCAI '09. ACM, New York, NY, pp. 17-22
- Sun, R.-X., Jia, J.-Y., and Jaeger, M., 2009. Intelligent Tree Modeling Based on L-system. IEEE 10th International Conference on Computer-Aided Industrial Design & Conceptual Design, 2009. November 26-29, 2009, Wenzhou, China. ISBN: 978-1-4244-5266-8; pp. 1096 - 1100, DOI: 10.1109/CAIDCD.2009.5375256
- Ning, X.-J., Zhang, X.-P., Wang, Y.-H., and Jaeger, M., 2009. Segmentation of architecture shape information from 3D point cloud. In Proceedings of the 8th international Conference on Virtual Reality Continuum and Its Applications in industry (Yokohama, Japan, December 14 - 15, 2009). S. N. Spencer, Ed. VRCAI '09. ACM, New York, NY, pp. 127-132
- Dai, M.-G., Zhang, X.-P., Zhang, Y.-K., and Jaeger, M., 2009. Segmentation of Point Cloud Scanned from Trees. In Proceedings of Workshop on 3D content and applications with ACCV 2009, September 24, 2009, Xi'an, China. pp. 1-12
  Url: http://www.mendeley.com/research/segmentation-point-cloud-scanned-trees-4
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