

Curriculum Vitae



Personal Details

Name Jun.-Prof. Dr. Christian Hansen
Date of Birth February 11, 1980
Place of Birth Frankfurt am Main, Germany
Nationality German

Office Address Faculty of Computer Science
Otto-von-Guericke University Magdeburg
Universitätsplatz 2
39104 Magdeburg, Germany

Office Phone +49 391 6752861
E-Mail hansen@isg.cs.uni-magdeburg.de

Academic Degrees

- 2013 **Junior Professor of Computer-Assisted Surgery (Jun.-Prof.)**
Otto-von-Guericke University Magdeburg, Faculty of Computer Science
- 2012 **Doctor of Philosophy in Computer Science (Dr.)**
Jacobs University Bremen, School of Engineering and Science
- 2006 **Engineer of Computational Visualistics (Dipl.-Ing.)**
Otto-von-Guericke University Magdeburg, Faculty of Computer Science

Career

Sep 2013 – present **Head of Computer-Assisted Surgery Group**
Otto-von-Guericke University Magdeburg, Faculty of Computer Science

- Supervision of 4 PhD projects and >10 undergraduate students projects in the field of computer-assisted surgery, medical visualization, and human-computer interaction
- Management of 2 BMBF-financed projects within the medical research campus STIMULATE
- Organization and execution of lectures and tutorials

Sep 2006 – Aug 2013 **Research Scientist**
Fraunhofer Institut for Medical Image Computing (MEVIS), Bremen

- Development and evaluation of surgical planning and navigation systems
- Planning, implementation, and evaluation of clinical trials
- Management of industry-financed projects in the field of computer-assisted radiology and surgery

Jul 2005 – Aug 2006 **Student Research Assistant**, University of Bremen, Center of Complex Systems and Visualization

Aug 2004 – Mar 2005 **Student Research Assistant**, Aristotle University Thessaloniki, Greece, Computer Vision and Image Processing Group

Feb 2004 – Jul 2004 **Student Research Assistant**, Otto-von-Guericke University Magdeburg, Faculty of Computer Science

Scientific Awards

- 2014 CURAC Mobility Grant, German Society of Computer- and Robot-Assisted Surgery
- 2013 OLB Foundation Science award, Oldenburgische Landesbank
- 2012 Best Paper Award, International Journal of Computer-Assisted Radiology and Surgery
- 2012 CURAC Travel Grant, German Society of Computer- and Robot-Assisted Surgery

Selected Publications

- [1] Lawonn, K., Luz, M., Preim, B., and **Hansen, C.** "Illustrative Visualization of Vascular Models for Static 2D Representations". In: *Medical Image Computing and Computer-Assisted Intervention (MICCAI)* (2015), in print.
- [2] Mewes, A., Saalfeld, P., Riabikin, O., Skalej, M., and **Hansen, C.** "A gesture-controlled projection display for CT-guided interventions". In: *Int J Comput Assist Radiol Surg* (2015), in print.
- [3] **Hansen, C.**, Zidowitz, S., Stravrou, G., Oldhafer, K. J., and Hahn, H. K. "Impact of model-based risk analysis for liver surgery planning". In: *Int J Comput Assist Radiol Surg* 9.2 (2014), pp. 473–480.
- [4] **Hansen, C.**, Black, D., Lange, C., Rieber, F., Lamade, W., Donati, M., Oldhafer, K. J., and Hahn, H. K. "Auditory support for resection guidance in navigated liver surgery". In: *Int J Med Robot* 9.1 (2013), pp. 36–43.
- [5] **Hansen, C.**, Zidowitz, S., Ritter, F., Lange, C., Oldhafer, K., and Hahn, H. K. "Risk maps for liver surgery". In: *Int J Comput Assist Radiol Surg* 8.3 (2013), pp. 419–428.
- [6] **Hansen, C.**, Wieferich, J., Ritter, F., Rieder, C., and Peitgen, H.-O. "Illustrative Visualization of 3D Planning Models for Augmented Reality in Liver Surgery". In: *Int J Comput Assist Radiol Surg* 5.2 (2010), pp. 133–141.
- [7] Ritter, F., **Hansen, C.**, Wilkens, K., Köhn, A., and Peitgen, H. "User Interfaces for Direct Interaction with 3D Planning Data in the Operation Room". In: *Journal of i-com (Zeitschrift für interaktive und kooperative Medien)* 8.1 (2009), pp. 24–31.
- [8] **Hansen, C.**, Zidowitz, S., Hindennach, M., Schenk, A., Hahn, H., and Peitgen, H.-O. "Interactive Determination of Robust Safety Margins for Oncologic Liver Surgery". In: *Int J Comput Assist Radiol Surg* 4.5 (2009), pp. 469–474.
- [9] **Hansen, C.**, Köhn, A., Schlichting, S., Weiler, F., Konrad, O., Zidowitz, S., and Peitgen, H.-O. "Intraoperative Modification of Resection Plans for Liver Surgery". In: *Int J Comput Assist Radiol Surg* 2.3-4 (2008), pp. 291–297.
- [10] Ritter, F., **Hansen, C.**, Dicken, V., Konrad, O., Preim, B., and Peitgen, H.-O. "Real-time illustration of vascular structures". In: *IEEE Transactions on Visualization and Computer Graphics* 12.5 (2006), pp. 877–884.