

Curriculum Vitae, Alexander Olavi Hartl

Personal information

Surname(s) / First name(s) **Hartl, Alexander Olavi**
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Email(s) hartl@in.tum.de
Nationality(-ies) German, Finnish
Date of birth 26.03.1981
Gender Male

Academic resume

09.1987 - 08.1991 1th - 4th grade, Grundschule Achslach, Germany
09.1991 - 08.1992 5th grade, Hauptschule Ruhmannsfelden, Germany
09.1992 - 08.1999 5th - 11th grade, Comenius Gymnasium Deggendorf, Germany
09.1999 - 06.2001 German 'Abitur', Comenius Gymnasium Deggendorf, (German graduation, title: Allgemeine Hochschulreife), grade: 1.8 (range 1.0 - 6.0)
10.2002 - 03.2008 Computer Science with minor subject Physics, Technische Universität München (TUM), München, Germany (title: Diplom Informatiker), thesis grade: 1.0, average grade: 1.2 (range 1.0 - 5.0)

Military service

07.2001 - 03.2002 4.Pionierbataillon Bogen, Germany

Working experience

07.2002 - 10.2002 Mercantile employee, Stangl AG Deggendorf, Germany
04.2005 - 07.2005 Tutor for computer science, Technische Universität München (TUM), München, Germany
04.2008 - 06.2008 Research assistant, Technische Universität München (TUM), München, Germany
07.2008 - 03.2009 Research assistant, Georgetown University, Washington DC, USA
04.2009 - today Doctoral candidate, Technische Universität München (TUM), München, Germany

Languages

Mother tongue(s) **German, Finnish**
Further language(s)

*Self-assessment
European level^(*)*

English
French

| Understanding | | Speaking | | Writing |
|---------------|---------|--------------------|-------------------|---------|
| Listening | Reading | Spoken interaction | Spoken production | |
| C1 | C2 | C1 | C1 | C1 |
| A1 | A1 | A1 | A1 | A1 |

^(*) Common European Framework of Reference (CEF) level

Publications

- 06.2007 *Intraoperative nuclear imaging using navigated gamma-probes for tumor localization*, T. Wendler, A. Hartl, J. Traub, S. I. Ziegler, N. Navab, Annual Meeting of Society of Nuclear Medicine, Washington D.C., USA, 2nd-6th June 2007 (SNM 2007), 48: p. 162
- 07.2007 *Adding navigation to radio-guided surgery: new possibilities, new problems, new solutions*, T. Wendler, J. Traub, A. Hartl, T. Lasser, M. Burian, A. Buck, F. Daghighian, M. Schwaiger, S. I. Ziegler, N. Navab, 3rd Russian Bavarian Conference on Biomedical Engineering, Erlangen, Germany, 2nd-3rd July 2007 (RBC Biomed 2007), pp. 96-100
- 10.2007 *Towards intra-operative 3D nuclear imaging: reconstruction of 3D radioactive distributions using tracked gamma probes*, T. Wendler, A. Hartl, T. Lasser, J. Traub, F. Daghighian, S. I. Ziegler, N. Navab, 10th International Conference on Medical Image Computing and Computer Assisted Intervention, 29th October - 2nd November 2007, Brisbane, Australia, (MICCAI 2007), pp. 909-917
- 10.2007 *Towards intra-operative 3D nuclear imaging: development and evaluation of ad hoc models*, A. Hartl, T. Wendler, T. Lasser, J. Traub, S. Ziegler, N. Navab, Annual meeting of Deutsche Gesellschaft für Computer-und Roboter-Assistierte Chirurgie (CURAC 2007), Karlsruhe, Germany
- 03.2008 *Confidence visualization and robust statistical inference by means of navigation in beta probe surface reconstruction*, A. Hartl, T. Wendler, N. Navab, Diploma thesis, Technische Universität München (TUM), München, Germany
- 06.2008 *3D Intra-operative nuclear imaging for SLNB in neck*, T. Wendler, A. Hartl, T. Lasser, J. Traub, S. Ziegler, N. Navab, Proceedings of Annual Meeting of Society of Nuclear Medicine (SNM 2008), Houston, USA
- 06.2008 *Confident radioactivity surface reconstruction for control of resection borders*, A. Hartl, T. Wendler, J. Traub, T. Lasser, S. Ziegler, N. Navab, Proceedings of Annual Meeting of Society of Nuclear Medicine (SNM 2008), Houston, USA
- 09.2008 *Tracking-based statistical correction for radio-guided cancer surgery*, A. Hartl, T. Wendler, T. Lasser, S. Ziegler, N. Navab, Proceedings of Augmented environments for Medical Imaging and Computer-aided Surgery(AMI-ARCS 2008), New York, USA
- 06.2009 *A comparison study of two reconstruction methods for gated Cone-Beam CT*, A. Hartl, Z. Yaniv, Proceedings of Computer Assisted Radiology and Surgery (CARS 2009), Berlin, Germany
- 09.2009 *Evaluation of a 4D Cone-Beam CT Reconstruction Approach using a Simulation Framework*, A. Hartl, Z. Yaniv, Proceedings of Engineering in Medicine and Biology Society (EMBC 2009), Minneapolis, USA

- 10.2010 *Comparison study of detection models for nuclear probes*, A. Hartl, N. Navab, S. I. Ziegler, Proceedings of Annual Congress of the European Association of Nuclear Medicine (EANM 2010), Vienna, Austria
- 11.2010 *Models of detection physics for nuclear probes in freehand SPECT reconstruction*, A. Hartl, N. Navab, S. I. Ziegler, Proceedings of IEEE Medical Imaging Conference (IEEE/MIC 2010), Knoxville, Tennessee, USA
- 02.2011 *Evaluation of an ad hoc model of detection physics for navigated beta-probe surface imaging*, D. I. Shakir, A. Hartl, N. Navab, S. I. Ziegler, Proceedings of SPIE Visualization, Image-Guided Procedures, and Modeling Conference (SPIE 2011), Lake Buena Vista, Florida, USA
- 11.2011 *Impact of acquisition geometry and physical model on Freehand SPECT reconstructions*, A. Hartl, T. Lasser, N. Navab, S. I. Ziegler, Proceedings of IEEE Medical Imaging Conference (IEEE/MIC 2011), Knoxville, Valencia, Spain
- 02.2012 *Two new ad-hoc models of detection physics and their evaluation for navigated beta probe surface imaging*, D. I. Shakir, A. Hartl, F. R. Schneider, J. Pulko, S. I. Ziegler, N. Navab, T. Lasser, Proceedings of SPIE Visualization, Image-Guided Procedures, and Modeling Conference (SPIE 2012), San Diego, California, USA
- 02.2012 *Freehand SPECT reconstructions using look up tables*, A. Hartl, D. I. Shakir, R. Kojchev, N. Navab, S. I. Ziegler, T. Lasser, Proceedings of SPIE Visualization, Image-Guided Procedures, and Modeling Conference (SPIE 2012), San Diego, California, USA
- 10.2012 *Towards Intra-operative PET for Head and Neck Cancer: Lymph Node Localization Using High-energy Probes*, D. I. Shakir, A. Okur, A. Hartl, P. Matthies, M. Essler, S. I. Ziegler, T. Lasser, N. Navab, Proceedings of the 15th International Conference on Medical Image Computing and Computer Assisted Interventions (MICCAI 2012), Nice, France