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Ansættelse

Lektor

Mærsk Mc-Kinney Møller Instituttet
Syddansk Universitet
Odense M
1. maj 2017 → present

Lektor

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SDU Robotics
Syddansk Universitet
1. jan. 1998 → present

Postdoc

Danmarks Tekniske Universitet
Kongens Lyngby, Danmark
1. maj 2016 → 30. apr. 2017

Ph.d.-stipendie

Danmarks Tekniske Universitet
Kongens Lyngby, Danmark
1. sep. 2012 → 14. mar. 2016

Undervisning og vejledning

Advanced Computer Vision

Jakob Wilm
01/02/2020 → …

Digital 3D Geometry Processing

Jakob Wilm
01/09/2016 → 31/12/2017

Introduction to Robotics, Artificial Intelligence, and Computer Vision

Jakob Wilm
01/09/2018 → 31/01/2019

Medical Imaging 1

Thiusius Rajeeth Savarimuthu, Dirk Kraft & Jakob Wilm
01/09/2017 → 31/01/2018

Medical Imaging 1

Thiusius Rajeeth Savarimuthu, Dirk Kraft & Jakob Wilm
01/09/2018 → 31/01/2019

Medical Imaging 1

Thiusius Rajeeth Savarimuthu & Jakob Wilm
02/09/2019 → 31/01/2020

Object Oriented Programming and Software Development

Jakob Wilm
01/02/2019 → 30/06/2020

PhD medvejleder, Janus Nørtoft Jensen

Jakob Wilm
01/01/2017 → 26/02/2021

PhD medvejleder, Morten Hannemose

Jakob Wilm
01/12/2016 → 19/11/2020

Project in Advanced Robotics

Jakob Wilm
01/02/2020 → …

Signal processing and industrial computer vision

Jakob Wilm
01/09/2018 → …

Supervision Pole Position Project

Jakob Wilm
01/09/2016 → 31/01/2017

Supervision, Drawing Robot

Jakob Wilm
01/04/2018 → …

Publikationer

Surface reconstruction from structured light images using differentiable rendering

Jensen, J. N., Hannemose, M., Bærentzen, J. A., Wilm, J., Frisvad, J. R. & Dahl, A. B., 2. feb. 2021, I: Sensors (Switzerland). 21, 4, 16 s., 1068.

Design of Automated Robotic System for Draping Prepreg Composite Fabrics

Ellekilde, L. P., Wilm, J., Nielsen, O. W., Krogh, C., Kristiansen, E., Gunnarsson, G. G., Stenvang, T. S., Jakobsen, J., Kristiansen, M., Glud, J. A., Hannemose, M., Aanæs, H., De Kruijk, J., Sveidahl, I., Ikram, A. & Petersen, H. G., jan. 2021, I: Robotica. 39, 1, s. 72-87

Alignment of rendered images with photographs for testing appearance models
Hannemose, M., Doest, M. E. B., Luongo, A., Gregersen, S. K. S., Wilm, J. & Frisvad, J. R., 1. nov. 2020, I: Applied Optics. 59, 31, s. 9786-9798

Will it Crease or Cease? A study of debulking of air pockets in automated prepreg composite layup
Krogh, C., Jakobsen, J. & Wilm, J., nov. 2020, I: Composites Part A: Applied Science and Manufacturing. 138, November, 106052.

A robot system arranged for autonomously obtaining biological surface samples from a patient
Savarimuthu, T. R., Petersen, H. G., Iversen, N., Kramberger, A., Juan, I. I. S., Wilm, J., Schmidt, M. K., Deniša, M., Lindvig, A. P., Buch, A. G., Winther, T. S. & Sloth, C., 14. maj 2020, (Afsendt) Patentnr. eu 20174694.8 - 1155, 14. maj 2020, Prioritetsdato 14. maj 2020, Prioritetsnr. 72997EP01

A robotic sampling apparatus and a method for obtaining an intra-cavity biological surface sample from a patient
Savarimuthu, T. R., Petersen, H. G., Iversen, N., Kramberger, A., Schmidt, M. K., Buch, A. G., Deniša, M., Winther, T. S., Juan, I. I. S., Wilm, J., Lindvig, A. P. & Sloth, C., 14. maj 2020, Prioritetsdato 14. maj 2020, Prioritetsnr. 72996EP01

A sample obtaining device
Savarimuthu, T. R., Petersen, H. G., Iversen, N., Kramberger, A., Juan, I. I. S., Wilm, J., Schmidt, M. K., Deniša, M., Lindvig, A. P., Buch, A. G., Winther, T. S. & Sloth, C., 14. maj 2020, (Afsendt) Patentnr. eu 20174700.3 - 1122, 14. maj 2020, Prioritetsdato 14. maj 2020, Prioritetsnr. 72980EP01

Rapid Estimation of Optical Properties for Simulation-Based Evaluation of Pose Estimation Performance
Iversen, T. M., Wilm, J. & Kraft, D., nov. 2019, *Proceedings of the 2019 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS).* IEEE, s. 2030-2037 (I E E E International Conference on Intelligent Robots and Systems. Proceedings).

Superaccurate camera calibration via inverse rendering
Hannemose, M., Wilm, J. & Frisvad, J. R., 1. jan. 2019, *Modeling Aspects in Optical Metrology VII.* Bodermann, B. & Frenner, K. (red.). USA: SPIE - International Society for Optical Engineering, 9 s. 1105717. (Proceedings of SPIE - The International Society for Optical Engineering, Bind 11057).

Video Frame Interpolation via Cyclic Fine-Tuning and Asymmetric Reverse Flow
Hannemose, M., Jensen, J. N., Einarsson, G., Wilm, J., Dahl, A. B. & Frisvad, J. R., 2019, *Image Analysis - Proceedings of the 21st Scandinavian Conference, SCIA 2019.* Felsberg, M., Forssén, P-E., Unger, J. & Sintorn, I-M. (red.). Springer VS, s. 311-323 (Lecture Notes in Computer Science, Bind 11482).

Effects of subsurface scattering on the accuracy of optical 3D measurements using miniature polymer step gauges
Wilm, J., Madruga, D. G., Jensen, J. N., Gregersen, S. S., Doest, M. E. B., Guerra, M. G., Aanæs, H. & De Chiffre, L., 2018, *European Society for Precision Engineering and Nanotechnology, Conference Proceedings - 18th International Conference and Exhibition, EUSPEN 2018.* Riemer, O., Savio, E., Billington, D., Leach, R. K. & Phillips, D. (red.). euspen, s. 449-450 (European Society for Precision Engineering and Nanotechnology, Conference Proceedings - 18th International Conference and Exhibition, EUSPEN 2018).

A perfomance assesment of a 2 axis scanning mirror galvanometer for powder bed fusion
Pedersen, D. B., Andersen, S. A., Nielsen, J. S., Eiriksson, E. R., Nielsen, J. B., Wilm, J., Aanæs, H. & Hansen, H. N., 2017, *Proceedings of the Joint Special Interest Group meeting between euspen and ASPE.*

An Error Analysis of Structured Light Scanning of Biological Tissue
Jensen, S. H. N., Wilm, J. & Aanæs, H., 2017, *Image Analysis.* Springer, s. 135-145

In-line 3D print failure detection using computer vision
Lyngby, R. A., Wilm, J., Eiriksson, E. R., Nielsen, J. B., Jensen, J. N., Aanæs, H. & Pedersen, D. B., 2017, *Dimensional Accuracy and Surface Finish in Additive Manufacturing.* 4 s.

Photogrammetry for Repositioning in Additive Manufacturing
Jensen, J. N., Lyngby, R. A., Aanæs, H., Eiriksson, E. R., Nielsen, J. B., Wilm, J. & Pedersen, D. B., 2017, *Joint Special Interest Group meeting between euspen and ASPE .*

PicPrint: Embedding pictures in additive manufacturing
Nielsen, J. B., Eiriksson, E. R., Lyngby, R. A., Wilm, J., Jensen, J. N., Aanæs, H. & Pedersen, D. B., 2017, *Joint Special Interest Group meeting between euspen and ASPE .*

Scene reassembly after multimodal digitization and pipeline evaluation using photorealistic rendering
Stets, J. D., Corso, A. D., Nielsen, J. B., Lyngby, R. A., Jensen, S. H. N., Wilm, J., Doest, M. B., Gundlach, C., Eiriksson, E. R., Conradsen, K., Dahl, A. B., Bærentzen, J. A., Frisvad, J. R. & Aanæs, H., 2017, I: Applied Optics. 56, 27, s. 7679-7690

Precision and Accuracy Parameters in Structured Light 3-D Scanning
Eiriksson, E. R., Wilm, J., Pedersen, D. B. & Aanæs, H., apr. 2016, I: International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences. XL-5/W8, s. 7-15

Real Time Structured Light and Applications
Wilm, J., 2016

VirtualTable: a projection augmented reality game
Corso, A. D., Olsen, M. D., Steenstrup, K. H., Wilm, J., Jensen, S. H. N., Paulsen, R. R., Eiriksson, E. R., Nielsen, J. B., Frisvad, J. R., Einarsson, G. & Kjer, H. M., 2. nov. 2015, *SIGGRAPH Asia 2015 Posters, SA 2015.* a40

Method for Surface Scanning in Medical Imaging and Related Apparatus
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An MRI Compatible Surface Scanner
Olesen, O. V., Wilm, J., Kouwe, A. V. D., Jensen, R. R., Larsen, R. & Wald, L. L., 2015.

Correction of Motion Artifacts for Real-Time Structured Light
Wilm, J., Olesen, O. V., Paulsen, R. R. & Larsen, R., 2015, *Image Analysis.*

Quality Assurance Based on Descriptive and Parsimonious Appearance Models
Nielsen, J. B., Eiriksson, E. R., Kristensen, R. L., Wilm, J., Frisvad, J. R., Conradsen, K. & Aanæs, H., 2015, *MAM2015: Eurographics Workshop on Material Appearance Modeling: Issues and Acquisition.*

Structured Light Scanning of Skin, Muscle and Fat
Wilm, J., Jensen, S. H. N. & Aanæs, H., 2015

A Unified Approach to Diffusion Direction Sensitive Slice Registration and 3-D DTI Reconstruction From Moving Fetal Brain Anatomy
Hansen, M. F., Seshamani, S., Kroenke, C., Cheng, X., Chapman, T., Wilm, J., Rousseau, F. & Studholme, C., feb. 2014, I: I E E E Transactions on Medical Imaging. 33, 2, s. 272-289

Accurate and Simple Calibration of DLP Projector Systems
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DLP technology application: 3D head tracking and motion correction in medical brain imaging
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SLStudio: Open-source framework for real-time structured light
Wilm, J., Olesen, O. V. & Larsen, R., 2014, *Proceedings of the 4th International Conference on Image Processing Theory, Tools and Application (IPTA 2014).*

Adapting Parcellation Schemes to Study Fetal Brain Connectivity in Serial Imaging Studies
Cheng, X., Wilm, J., Seshamani, S., Fogtmann, M., Kroenke, C. & Studholme, C., 2013, *2013 35th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC).*

Fast and Practical Head Tracking in Brain Imaging with Time-of-Flight Camera
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Real Time Surface Registration for PET Motion Tracking
Wilm, J., Olesen, O. V., Paulsen, R. R., Højgaard, L., Roed, B. & Larsen, R., 2011, *Image Analysis.*

Priser

Otto Mønsted Bright Idea
Eiriksson, E. R. (Modtager), Wilm, Jakob (Modtager) & Pedersen, D. B. (Modtager), 2019