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Employment

Associate Professor

The Maersk Mc-Kinney Moller Institute
University of Southern Denmark
Odense M
1. Jan 1998 → present

Associate Professor

SDU Health Informatics
University of Southern Denmark
1. Jan 1998 → present

Associate Professor

SDU Galaxy
University of Southern Denmark
Odense M, Denmark
1. Jan 1998 → present

Research outputs

Data Visualization Dashboards in Robotic Rehabilitation

Liakopoulou, C., Mansourvar, M., Bøglid, A., Naemi, A. & Stengaard Sørensen, A., 27. May 2021, *Public Health and Informatics*. Mantas, J., Stoicu-Tivadar, L., Chronaki, C., Hasman, A., Weber, P., Gallos, P., Crişan-Vida, M., Zoulias, E. & Chirila, O. S. (eds.). IOS Press, Vol. 281. p. 278-282 (Studies in Health Technology and Informatics).

ROS-Enabled Hardware Framework for Experimental Robotics

Steckhahn-Strohmer, B., Bøglid, A., Sørensen, A. S. & Larsen, L. B., Dec 2019, *Proceedings of International Conference on Reconfigurable Computing and FPGAs*. Andrews, D., Cumplido, R., Feregrino, C. & Platzner, M. (eds.). IEEE, 2 p.

Bodily Human Robot Interaction

Solis, J., Sørensen, A. S. & Rasmussen, G., 22. Mar 2019, *14th ACM/IEEE International Conference on Human-Robot Interaction (HRI)*. IEEE, p. 683-684

RoBody Interaction: A New Approach at Kinesthetic Human Robot Interaction

Sørensen, A. S. & Rasmussen, G., Nov 2018, *Proceedings of the 27th IEEE International Symposium on Robot and Human Interactive Communication: RO-MAN*. IEEE, p. 893-900 (IEEE RO-MAN proceedings).

Individualised and adaptive upper limb rehabilitation with industrial robot using dynamic movement primitives

Nielsen, J., Sørensen, A. S., Christensen, T. S., Savarimuthu, T. R. & Kulvicius, T., 2017. 4 p.

Natural Kinesthetic Interaction and Social Relations Between Training-Robots and Their Users

Sørensen, A. S., Nielsen, J., Maagaard, J., Nielsen, J. L., Rasmussen, G. & Day, D., 2017. 1 p.

Student to student teaching in a robot electronics course

Skriver, M. & Sørensen, A. S., 2017, *Exploring Teaching for Active Learning in Engineering Education: Book of Abstracts*. p. 121 1 p.

New exercise-integrated technology can monitor the dosage and quality of exercise performed against an elastic resistance band by adolescents with patellofemoral pain: an observational study

Rathleff, M. S., Bandholm, T., McGirr, K. A., Harring, S. I., Sørensen, A. S. & Thorborg, K., Jun 2016, In: *Journal of Physiotherapy*. 62, 3, p. 159-63

Low-cost modular robotic system for neurological rehabilitative training

Sørensen, A. S., Nielsen, J., Maagaard, J., Skriver, M., Lin, C-C. & Schultz, U. P., 19. May 2016, *Proceedings - 2016 IEEE International Conference on Industrial Technology, ICIT 2016*. IEEE Press, p. 1585-1591

Adherence to commonly prescribed, home-based strength training exercises for the lower extremity can be objectively monitored using the Bandcizer

Rathleff, M. S., Thorborg, K., Rode, L. A., McGirr, K., Sørensen, A. S., Bøgild, A. & Bandholm, T., 2015, In: *Journal of strength and conditioning research / National Strength & Conditioning Association*. 29, 3, p. 627-636

Designing of low-cost 1-DOF Robot Device

Sørensen, A. S. & Maagaard, J., 2014, Syddansk Universitet. Mærsk Mc-Kinney Møller Institutet. 5 p. (Technical Reports - Maersk Mc-Kinney Møller Institute, University of Southern Denmark, Vol. 2014-1).

Detection of needle insertion point for phlebotomy in human forearms

Savarimuthu, T. R. & Sørensen, A. S., 2014, In: *International Journal of Mechanics and Control*. 15, 1, p. 61-67

Kinesthetic human/robot coordination: The coordination of movements for interaction

Sørensen, A. S., Rasmussen, G. & Day, D., 2014, *HRI 2014 - Proceedings of the 2014 ACM/IEEE International Conference on Human-Robot Interaction*. Association for Computing Machinery, p. 292-293

Towards Using a Generic Robot as Training Partner: Off-the-shelf robots as a platform for flexible and affordable rehabilitation

Sørensen, A. S., Savarimuthu, T. R., Nielsen, J. & Schultz, U. P., 2014, *Proceedings of the 9th ACM/IEEE International Conference on Human-Robot Interaction*. Association for Computing Machinery, p. 294-295

Towards Automatic Migration of ROS Components from Software to Hardware

Lange, A. B., Schultz, U. P. & Sørensen, A. S., 8. Nov 2013, *Proceedings of the Fourth International Workshop on Domain-Specific Languages and Models for Robotic Systems*. 4 p.

Unity-Link: A Software-Gateway Interface for Rapid Prototyping of Experimental Robot Controllers on FPGAs

Lange, A. B., Schultz, U. P. & Sørensen, A. S., 3. Nov 2013, *Proceedings of the IEEE/RSJ International Conference on Intelligent Robots and Systems*. IEEE, p. 3899-3906

Sensorenhed til kvantificering af fysisk træning med elastik

Sørensen, A. S., Nov 2013, IPC No. pa2012 00312, 7. May 2012

Unity: A Unified Software/Hardware Framework for Rapid Prototyping of Experimental Robot Controllers using FPGAs

Lange, A. B., Schultz, U. P. & Sørensen, A. S., 6. May 2013. 4 p.

A Doppler RADAR sensor for trampoline jumping

Sørensen, A. S., 2013, Patent No. PA 2013 70134, 8. Mar 2013

HartOS - A hardware implemented RTOS for hard real-time applications

Lange, A. B., Andersen, K. H., Schultz, U. P. & Sørensen, A. S., 23. May 2012. 6 p.

An FPGA based approach to increased flexibility, modularity and integration of low level control in robotics research
Falsig, S. & Sørensen, A. S., 2011, *International Conference on Intelligent Robots and Systems (IROS), 2010 IEEE/RSJ . IEEE*, p. 6119-6124

Real-time medical video processing, enabled by hardware accelerated correlations
Savarimuthu, T. R., Kjaer-Nielsen, A. & Sorensen, A. S., 2011, In: *Journal of Real-Time Image Processing*. 6, 3, p. 187-197 11 p.

A System on Chip approach to enhanced learning in interdisciplinary robotics
Sørensen, A. S. & Falsig, S., 22. Oct 2010, *2010 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*. IEEE, p. 4050-4056

Velfærdsteknologi i rugekassen: Hvad er velfærdsteknologi
Sørensen, A. S., 7. May 2010, In: *Mandag Morgen*. p. 14-17 4 p.

A step toward 'plug and play' robotics with SoC technology
Sørensen, A. S., Falsig, S. & Ugilt, R., 2010. 4 p.

An FPGA based Node-on-Chip Architecture, for Rapid Robotics Research
Falsig, S. & Sørensen, A. S., 2010.

Improving the quality of near-infrared imaging of in vivo blood vessels using image fusion methods
Jensen, A. K., Savarimuthu, T. R. & Sorensen, A. S., 1. Dec 2009, *Proceedings of the IASTED International Conference on Modelling, Simulation, and Identification, MSI 2009*.

TosNet: An easy-to-use, real-time communications protocol for modular, distributed robot controllers
Falsig, S. & Sørensen, A. S., 2009, *Proceedings*. Robocomm, p. 1-6 6 p.

A Real-Time Embedded System for Stereo Vision Preprocessing Using an FPGA
Kjær-Nielsen, A., Jensen, L. B. W., Sørensen, A. S. & Krüger, N., 2008, *Reconfigurable Computing and FPGAs, 2008. ReConFig '08. International Conference on . IEEE*, p. 37-42

DETECTION OF VESSELS IN HUMAN FOREARMS USING 2D MATCHED FILTERING
Savarimuthu, T. R. & Sørensen, A. S., 2008, *Signal and Image Processing 2008*. Cristea, P. D. (ed.). ACTA Press, p. 294-299 6 p.

Tactile Sensing Methods for Automated Blood Samples On Humans
Sørensen, A. S. & Savarimuthu, T. R., 2008, *Advances in mobile robotics: Proceedings of the Eleventh International Conference on Climbing and Walking Robots and the Support Technologies for Mobile Machines*. USA: World Scientific, Vol. 1. p. 875-889 15 p.

Automated production of one-of-a-kind fiber compositepreforms
Sørensen, A. S. & Dalgaard, L., 2006, *Proceedings of the 12th IASTED International Conference: Robots And Applications*. ACTA Press, p. 73-78 6 p.

Implementation of a practical reconfigurable manipulator system based on hybrid parallel and sequential elements
Sørensen, A. S., Jakobsen, O. G., Favrholt, P., Petersen, H. G., Jacobsen, N. J. & Steinicke, J., 2004, *International Conference on Intelligent Manipulation and Grasping (IMG04)*. p. 404-409

A development of parallel robotic modules for long reach applications
Sørensen, A. S., Petersen, H. G., Jacobsen, N. J. & Jakobsen, O. G., 2001

Experiments in ergonomic robot-guided manipulation

Sørensen, A., Liu, C., Kim, S. M., Lynch, K. M. & Peshkin, M. A., 2000

Towards a generic controller for arbitrary robotic manipulators

Joosen, W., Jørgensen, B. N., Linder, S. M., Olsen, M. M., Perram, J. W., Petersen, H. G., Ruhoff, P. T., Sørensen, A., Sørensen, A. S. & Wagenaar, J. M., 2000, *Proceedings of IASTED International Conference on Robotics and Applications*. p. 34-40

Activities

Partnerskabet Space Exploration Danmark (External organisation)

Nicolai Iversen (Member) & Anders Stengaard Sørensen (Member)
Dec 2020 → Dec 2022

Trauma recovery

Anders Stengaard Sørensen (Participant)
4. Mar 2020

A future with robotics: Components in bodily interaction

Anders Stengaard Sørensen (Guest lecturer)
21. Nov 2019

RoBody interaction: Integrating embodied social practices in training robots

Anders Stengaard Sørensen (Guest lecturer)
15. Nov 2019

Adfærdsregulering gennem biofeedback

Anders Stengaard Sørensen (Guest lecturer)
9. Oct 2019

welfare technologies and the laboratory for robot-assisted training

Anders Stengaard Sørensen (Guest lecturer)
3. Apr 2019

Augmented Gravity: Robotassisteret træning

Anders Stengaard Sørensen (Guest lecturer)
2. Apr 2019

14th Annual ACM/IEEE International Conference on Human-Robot Interaction, HRI 2019

Anders Stengaard Sørensen (Participant), Gitte Rasmussen (Participant) & Jorge Solis (Participant)
11. Mar 2019

Social intelligence in Kinesthetic, Personalized, Adaptive Human-Robot Interaction

Jorge Solis (Organizer), Anders Stengaard Sørensen (Organizer) & Gitte Rasmussen (Organizer)
27. Aug 2018 → 29. Aug 2018

The resistance training sensor

Anders Stengaard Sørensen (Lecturer)
4. Dec 2014

Robotten som genoptræningsmakker

Anders Stengaard Sørensen (Lecturer)
20. Nov 2014

Versatile but accurate biofeedback and tele-training, rooted in resistance bands

Anders Stengaard Sørensen (Lecturer)
28. Oct 2014

Velfærdsteknologi i dag og i morgen: Perspektiver og scenarier over fremtidens velfærdsteknologier

Anders Stengaard Sørensen (Lecturer)
11. May 2010

University of Southern Denmark (External organisation)

Anders Stengaard Sørensen (Member)
29. Apr 2010 → 1. May 2010

University Technology Matchmaking Biotechnology and Medico-technology

Anders Stengaard Sørensen (Participant)
27. Apr 2010

University of Southern Denmark (External organisation)

Anders Stengaard Sørensen (Member)
5. Apr 2010 → 21. Apr 2010

Design of the masters education in welfare technology: The curriculum of the education

Anders Stengaard Sørensen (Advisor)
2. Dec 2008 → 30. Jun 2009

Technology forecast - Cognition and robotics: Working report about robot technology research in Denmark

Anders Stengaard Sørensen (Advisor)
10. Mar 2005 → 30. May 2005

Press/Media

TV2 News: Fell Down 26 Metres Is Now Able to Walk and Run

Anders Stengaard Sørensen
08/12/2009
1 Media contribution

Astronauter og sengeliggende patienter har meget til fælles

Anders Stengaard Sørensen
17/02/2021
1 Media contribution

Astronauter og sengeliggende patienter har meget til fælles

Anders Stengaard Sørensen
16/02/2021
1 Media contribution

Astronauter og sengeliggende patienter har meget til fælles

Anders Stengaard Sørensen
16/02/2021
1 Media contribution

Danish Aerospace Company ApS skal bygge nyt multifunktion træningsudstyr til astronauter

Anders Stengaard Sørensen
15/09/2018
1 Media contribution

Demokratiseret teknologi har forvandlet DTU robocup

Ole Ravn & Anders Stengaard Sørensen

08/04/2017

1 Media contribution

Elastikbåndet sladrer til fysioterapeuten

Anders Stengaard Sørensen

01/09/2012

1 item of Media coverage

Historien om skibsbyggeren, der endte med at bygge maskiner til mennesket

Anders Stengaard Sørensen

28/02/2016

1 Media contribution

KORT NYT

Anders Stengaard Sørensen

26/09/2013

1 item of Media coverage

Lindørobot på museum i Odense

Anders Stengaard Sørensen

26/06/2014

1 item of Media coverage

Mennesker minder om robotter -når vi træner. Vi laver den samme bevægelse igen og igen

Anders Stengaard Sørensen

28/08/2015

1 item of Media coverage

Musik som biofeedback - en træningsmetode til hjerneskadede

Anders Stengaard Sørensen

26/02/2019

1 Media contribution

Opstartsfirma sidder fast i patentstrid med SDU - truet af konkurs

Anders Stengaard Sørensen

28/08/2019

1 Media contribution

Opstartsfirma sidder fast i patentstrid med SDU - truet af konkurs

Anders Stengaard Sørensen

29/08/2019

1 Media contribution

Personlig værdighed gennem teknologi

Anders Stengaard Sørensen

26/04/2018

1 Media contribution

PRM / Astronauter og sengeliggende patienter har meget til fælles

Anders Stengaard Sørensen

16/02/2021

1 Media contribution

Robotforskere på udkig efter samarbejdspartnere

Anders Stengaard Sørensen

28/08/2015

1 item of Media coverage

ROBOTTEN Menneskets nye bedste ven

Anders Stengaard Sørensen & Morten Hansen

25/08/2013

1 item of Media coverage

Robotter i genoptræningen kan lette livet for kommunerne

Anders Stengaard Sørensen

04/12/2015

1 Media contribution

Robottræning kan vække lamme muskler

Anders Stengaard Sørensen

01/06/2013

1 item of Media coverage

Samarbejde giver styr på robotstandarderne

Anders Stengaard Sørensen

03/10/2013

1 item of Media coverage

SDU er flyvende: Her laver de træningsudstyr til astronauter

Anders Stengaard Sørensen

13/03/2017

1 Media contribution

Serieopfinder parat med elastiksensoren

Anders Stengaard Sørensen

30/09/2013

1 item of Media coverage

Teknologiske løsninger øger motivationen til at genoptræne

Anders Stengaard Sørensen

21/01/2020

1 Media contribution

Teknologiske løsninger øger motivationen til at genoptræne

Anders Stengaard Sørensen

21/01/2020

1 Media contribution

Træningsrobot modvirker tyngdekraften

Anders Stengaard Sørensen

19/11/2015

1 item of Media coverage

Universitet åbner klinik for genoptræning med robotarme

Anders Stengaard Sørensen

09/01/2020

1 Media contribution

Velfærdsteknologi skal øge motivationen for genoptræning

Anders Stengaard Sørensen

21/01/2020

1 Media contribution

Bijob

Nightingale Cybernetics & Anders Stengaard Holding ApS

Rolle: Ejer

Formål: Kommercialisering - inklusiv rådgivning - af opfindelser indberettet og returneret fra SDU, herunder:

Berøringsfri elasticitets sensor, Gleipner, RoboTrainer, RoboTrainer Light, Wire sensor for physical training, Wireless pneumatic sensor for monitoring physical training, Doppler Walk Sensor, Trampolinsensor, RADAR sleep sensor, Penposition, 3D vision adapter for smartphones and tablets, Exercise Machine Sensor, App til aflæsning af LCD displays på medicodevices, Waterski Sensor, Inclination sensor for resistance bands.