Danica Kragic

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EDUCATION

M.S.E. Mechanical Engineering, 1995, Technical University of Rijeka, Croatia

Ph.D. Computer Science, The Royal Institute of Technology KTH, 2001
Dissertation "Visual Servoing for Manipulation: Robustness and Integration Issues",
Advisor: Henrik I Christensen

Post doctoral training:

- 2001-2002, Centre for Autonomous Systems, Stockholm, Sweden (with Henrik I Christensen)
- 2003, Johns Hopkins University, Baltimore, USA (with Gregory D Hager)
- 2004, INRIA, Rennes, France (with Francois Chaumette)
- 2006, Brown University, Providence, USA (with Michael Black)
- 2006, Johns Hopkins University, Baltimore, USA (with Gregory D Hager)

Docent (habilitation): Computer Science at The Royal Institute of Technology KTH, 2006

CURRENT POSITION

Professor, School of Computer Science and Communication, CSC, KTH, 2008-present Director, Centre for Autonomous Systems, KTH, 2008-present Vice-Dean, responsible for research, CSC, KTH, 2010-present Head, Computer Vision and Active Perception Lab, 2010-present

POSITIONS OF TRUST

Chair, Foundation KK, Sweden, 2013
Max Planck Institute, Intelligent Systems: Board Member, 2013
Research Policy Committee at the Royal Swedish Academy of Sciences, 2012-present
STINT, Chair for Natural Sciences and Technology Expert Group, 2012-present
IEEE Robotics and Automation Awards Committee, 2012-present
Evaluation Committee, Foundation Knut and Alice Wallenberg, 2011-present
IEEE RAS Conference Editorial Board, 2006-present
Expert evaluator EU FP7, FET, DFG, 2008-present

PAST ACADEMIC POSITIONS AND POSITIONS OF TRUST

2010 - 2012 IEEE RAS Member Administrative Committee

2007 - 2008 Associate Professor, School of Computer Science and Communication, CSC, KTH

Jan 2007 - Dec 2008 Centre for Autonomous Systems, Deputy Director

2006 - 2010 Chair, IEEE RAS Technical Activity Board of Computer and Robot Vision

2005 - 2010 Coordinator, Autonomous Systems undergraduate specialization, KTH

2004 - 2007 Assistant Professor, School of Computer Science and Communication, CSC, KTH

2004 Researcher, INRIA, Rennes, France

2003 Researcher, Johns Hopkins University, USA

2001-2002 Postdoctoral researcher, CAS, KTH

1997-2001 PhD candidate, NADA, KTH

1999-2000 Teaching assistant, NADA, KTH

1991-1995 Teaching assistant, University of Rijeka, Croatia

GRADUATED Ph.D. STUDENTS

2012 Yasemin Bekiroglu (PhD, main supervisor)

2012 Niklas Bergstrom (PhD, main supervisor)

2012 Babak Rasolzadeh (PhD, co-supervisor)

2011 Javier Romero (PhD, main supervisor)

2011 Jeannette Bohg (PhD, main supervisor)

2011 Thomas Feix (PhD, main supervisor)

2010 Maja Karasalo (PhD, co-supervisor)

2007 Staffan Ekvall (PhD, main supervisor)

2009 Mattias Bratt (licentiate thesis, main supervisor)

2009 Johan Tegin (PhD, co-supervisor)

2007 Daniel Aarno (licentiate thesis, main supervisor)

CURRENT Ph.D. STUDENTS

Alejandro Marzinotto (PhD, main supervisor, 2013-2017)

Puren Guler (PhD, main supervisor, 2013-2017)

Ali Ghardizadeh (PhD, main supervisor, 2013-2017)

Kaiyu Hang (PhD student, main supervisor, 2012-2016)

Johannes Stork (PhD student, main supervisor, 2012-2016)

Virgile Hogman (PhD student, main supervisor, 2012-2016)

Martin Hjelm (PhD student, main supervisor, 2012-2016)

Francisco Vina (PhD student, main supervisor, 2012-2016)

Xavi Gratal (PhD student, main supervisor, 2011-2015)

Marianna Pronobis (PhD student, main supervisor, 2009-2013)

POSTDOCTORAL RESEARCHERS

Florian Pokorny (2011-)

Lazaros Nalpantidis (2011-12)

Christian Smith (2011-)

Yiannis Karayiannidis (2011-)

CarlHenrik Ek (2010-)

Gert Kootstra, (2010-12)

Renaud Detry (2010-2012)

Matthew Johnson-Roberson (2010-11)

Dan Song (2008-12)

Maria Ralph (2008)

Mårten Björkman (2007-10)

Kai Hubner (2006-09)

Hedvig Kjellström, (2006-09),

Ville Kyrki (2003 and 2005)

GRANTS

- 2013 PI EU FP7 TRADR (0.8 MEUR)
- 2013 co-PI EU FP7 RECONFIG (1 MEUR)
- 2013 PI, Swedish Research Council, CARMA (1.3 MEUR)
- 2012 PI EU FP7 RoboHow.Cog (0.7 MEUR)
- 2012 PI EU FP7 TOPOSYS (0.7 MEUR)
- 2011 PI ERC Starting Grant FLEXBOT (1.5 MEUR)
- 2010 PI EU FP7 eSMCs (0.7 MEUR)
- 2010 Coordinator EU FP7 TOMSY (total budget 3 MEUR, 0.7MEUR to KTH)
- 2009 PI, Swedish Research Council, Rambidrag, DAM (1.2MEUR)
- 2009 Coordinator SSF RoSy (3 MEUR)
- 2009 PI Croatian Ministry of Sciences (70KEUR)
- 2008 Coordinator EU FP7 IP GRASP (total budget 6.8MEUR, 1.2MEUR to KTH)
- 2008 PI SSF FFL Croma (0.9 MEUR)
- 2008 Co-PI EU FP7 IP CogX (1MEUR)
- 2006 Co-PI EU FP6 IP PACO-PLUS (1.4MEUR)
- 2006 PI, Swedish Research Council, (2.1MSEK)
- 2003 PI, Swedish Research Council, (1.9MSEK)
- 2002 co-PI, Swedish Research Council, (1.9MSEK)
- 2000, 2001, 2002, 2005 The Royal Swedish Academy of Sciences (KVA), excellence grant

PROFESSIONAL AWARDS

- 2013, IEEE ICRA Best Manipulation Paper Award
- 2012, Honorary Doctorate, Lappeenranta University of Technology
- 2012, IEEE IROS Best Cognitive Robotics Paper runner-up
- 2012, IEEE IROS Best Automation Paper runner-up
- 2012, IEEE Senior member
- 2011, The Royal Swedish Academy of Sciences, Member
- 2011, The Young Academy of Sweden, Member
- 2011, IEEE IROS Best Cognitive Robotics Paper Award
- 2008, SSF Research Leader of the Future Award
- 2007, IEEE Robotics and Automation Society, Early Academic Career Award
- 2004, IEEE ICRA 2004, finalist best vision paper award

TEACHING

Image Processing and Computer Vision, Undergraduate course, 2004 – 2010

Artificial Intelligence, Undergraduate Course, 2005 – 2011 Machine Learning, Undergraduate Course, 2004 – 2007 Artificial Intelligence and Multiagent Systems, Undergraduate Course, 2006 – 2007 Advanced individual course in Computer Science, 2010 -

EDITORIAL BOARDS

IEEE Transactions on Robotics Robotics and Autonomous Systems Journal of Robotics Foundations and Trends in Robotics IEEE RAS Conference Board

ORGANIZATIONAL COMMITTEES

General Chair, IEEE International Conference on Robotics and Automation, 2016 Area Chair, Computer Vision and Pattern Recognition, 2014 Publication Chair, IEEE International Conference on Robotics and Automation, 2013 Awards Chair, IEEE International Conference on Robotics and Automation, 2012 Publication Chair, IEEE Multi-Conference on Systems and Control, 2012 Publicity Chair, Robotics: Science and Systems, 2011 Area Chair, Robotics; Science and Systems, 2009, 2010

PLENARY AND SELECTED INVITED TALKS

Scandinavian AI Conference 2013

IFAC Symposium on Robot Control 2012

IEEE International Symposium in Robot and Human Interactive Communication 2010

Plenary/keynote NATO Advanced Studies Institute 2010

US-EU Workshop on Informatics for Bio-Inspired Design 2010

Distinguished Lecture Day of Robotics, University of Southern California 2010

12th International Scientific Conference on Production Engineering 2009

EU ICT Conference 2009

Croatian Academy of Sciences 2008

International Symposium on Robotics Research, ISRR 2007

Tubingen Perception Conference 2005

Nordic forum for human-computer interaction research 2004

WORKSHOP AND TUTORIAL ORGANIZER (selection)

- 1. 2010 Workshop: Representations for Object Grasping and Manipulation in Single and Dual Arm Tasks at the Robotics, Science and Systems Conference, RSS'10
- 2. 2009 Dagstuhl workshop: From form to function
- 3. 2008 Workshop: "Vision in Action: Efficient strategies for cognitive agents in complex environments" at the 10th European Conference on Computer Vision, ECCV'08
- 4. 2007 Workshop: "From features to actions: unifying perspectives in computational and robot vision" at the IEEE International Conference of Robotics and Automation, ICRA'07
- 5. 2005 Tutorial: "Visual Tracking: 2D/3D Methods and Cue Integration" at the IEEE International Conference of Robotics and Automation, ICRA05
- 6. 2004 Workshop: "Advances in Robot Vision From Domestic Environments to Medical Applications"

UNIVERSITY SERVICE

KTH ICT Platform, Board member Strategic Research Area ICT "The Next Generation", Board Member Future Faculty KTH, Board Member Undergraduate Committee Computer Science, Board Member, 2005-2010

VISITING REVIEW COMMITTEES

INRIA Robotics research 2013 New Eurasia Foundation 2013 Swiss National Science Foundation 2013 EC FP7 project reviewer (CloPeMa, firstMM), 2011 - present

TECHNICAL CONSULTING AND ADVISORY BOARDS

Revolution Labs Samsung

PUBLICATION LIST

BOOKS:

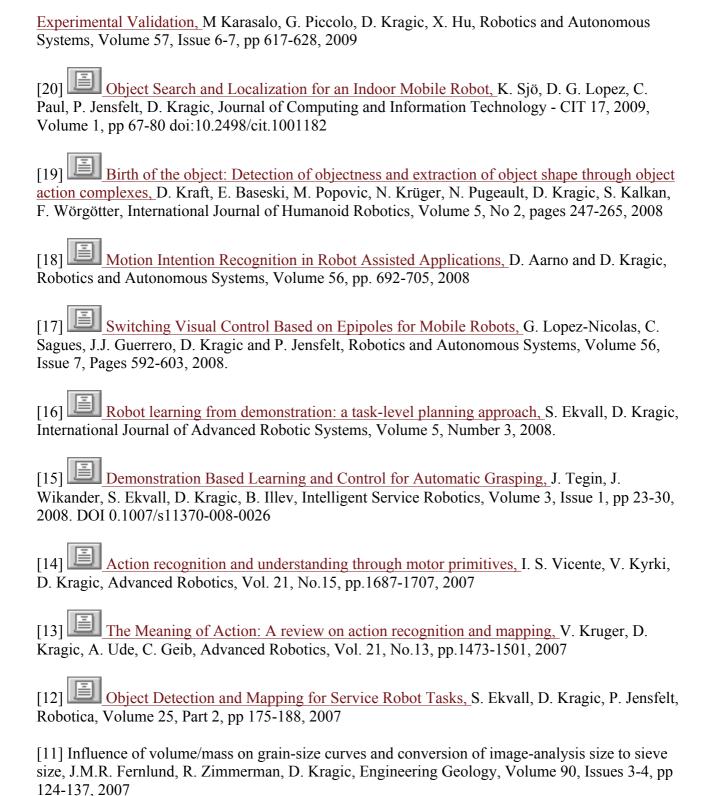
[2] Unifying Perspectives in Computational and Robot Vision, D. Kragic, V. Kyrki, Lecture notes in Electrical Engineering, Springer, ISBN: 978-0-387-75521-2

[1] Visual Servoing for Manipulation: Robustness and Integration Issues, PhD thesis, CVAP-NADA, Royal Institute of Technology, Stockholm, Sweden

JOURNALS:

- [40] Extracting postural synergies for robotic grasping, J. Romero, T. Feix, CH Ek, H. Kjellstrom, D. Kragic, IEEE Transactions on Robotics, to appear, 2013
- [39] Non-Parametric Hand Pose Estimation with Object Context, J. Romero, H Kjellstrom, CH Ek, D. Kragic, Image and Vision Computing, to appear, 2013
- [38] Grasping grasping in GRASP, D. Kragic, Journal of the Robotics Socienty of Japan, 31(4), pp.330-333, 2013
- [37] A metric for comparing the anthropomorphic motion capability of artificial hands, T. Feix, J. Romero, CH Ek, HB Schmiedmayer, D. Kragic, IEEE Transactions on Robotics, 29(1), pp.82-93, 2013
- [36] <u>Dual Arm Manipulation: A Survey, C. Smith, Y. Karayiannidis, L. Nalpantidis, X. Gratal, P. Qi, D.V. Dimarogonas, D. Kragic, Robotics and Autonomous Systems, 60(10), pp.1340-1353, 2012</u>

- [35] Enabling grasping of unknown objects through a synergistic use of edge and surface information, G. Kootstra, M. Popovic, J.A. Jorgensen, K. Kuklinski, K. Miatliuk, D. Kragic, N. Kruger, International Journal of Robotics Research, 31(10), pp.1190-1213, 2012
- [34] <u>VisGraB: A Benchmark for Vision-Based Grasping.</u> G. Kootstra, M. Popovic, J.A. Jorgensen, D. Kragic, H.G. Petersen, N. Kruger, Paladyn Journal of Behavioral Robotics, doi:10.2478/s13230-012-0020-5, 2012
- [33] <u>Design of a Flexible Tactile Sensor for Classification of Rigid and Deformable Objects, A.</u> Drimus, G. Kootstra, A. Bilberg, D. Kragic, Robotics and Autonomous Systems, http://dx.doi.org/10.1016/j.robot.2012.07.021, 2012
- [32] <u>Visual servoing on unknown objects</u>, X. Gratal, J. Bohg, J. Romero, D. Kragic, Mechatronics, 22(4), pp.423-435, 2012
- [31] <u>Assessing grasp stability based on learning and haptic data,</u> Y. Bekiroglu, J. Laaksonen, J.A. Jorgensen, V. Kyrki, D. Kragic, IEEE Transactions on Robotics, 27(3), pp.616-629, 2011
- [30] <u>Tracking Rigid Objects using Integration of Model-based and Model-free Cues, V. Kyrki, D. Kragic, Machine Vision and Applications, 22(2): pp.323-335, 2011</u>
- [29] <u>Visual object-action recognition: Inferring object affordances from human demonstration,</u> H. Kjellstrom, J. Romero, D. Kragic, Computer Vision and Image Understanding, Volume 115, Issue 1, pp.81-90, 2011
- [28] Primitive-Based Action Representation and Recognition, Sanmohan, V. Kruger, D. Kragic, H. Kjellstrom, Advanced Robotics, 25(6-7): pp.871-891, 2011
- [27] <u>Learning Actions from Observations</u>, V. Kruger, D.L. Herzog, Sanmohan, A. Ude, D. Kragic, Robotics and Automation Magazine, Volume 17, Issue 2, pp 30-43, 2010
- [26] A Strategy for Grasping Unknown Objects based on Co-Planarity and Colour Information, M. Popovic, D. Kraft, L. Bodenhagen, E. Baseski, N. Pugeault, D. Kragic, T. Asfour, N. Kruger, Robotics and Autonomous Systems, Volume 58, Issue 5, pp 551-565, 2010
- [25] <u>Learning Grasping Points with Shape Context</u>, J. Bohg, D. Kragic, Robotics and Autonomous Systems, Volume 58, Issue 4, pp 362-377, 2010
- [24] <u>Vision for Robotics</u>, D. Kragic, M. Vincze, Foundations and Trends in Robotics, Volume 1, Number 1, 2010
- [23] An active vision system for detecting, fixating and manipulating objects in real world, B. Rasolzadeh, M. Bjorkman, K. Huebner, D. Kragic, International Journal of Robotics Research, Volume 29. Number 2-3.2010
- Toward Grasp-Oriented Visual Perception for Humanoid Robots, M. Ralph, C. Barck-Holst, J. Bogh, B. Rasolzadeh, D. Song, K. Huebner, D. Kragic, International Journal of Humanoid Robotics, Volume 6, No 3, pp 387-434, 2009
- [21] Contour Reconstruction using Recursive Smoothing Splines Algorithms and



Volume 13, Issue 3, September 2006

[9] Education by competition, P. Fiorini, D. Kragic, IEEE Robotics & Automation Magazine,

and Autonomous Systems, Volume 54, Issue 10, pp 815-827, September 2006

[8] On-line Task Recognition and Real-Time Adaptive Assistance for Computer Aided

Measurement Errors in Visual Servoing, V. Kyrki, D. Kragic, H. Christensen, Robotics

- <u>Machine Control</u>, S. Ekvall, D. Aarno and D. Kragic, IEEE Transactions on Robotics, Volume 22, Issue 5, pp 1029-1033 October 2006
- [7] Object Recognition and Pose Estimation using Color Cooccurrence Histograms and Geometric Modeling, S. Ekvall, D. Kragic and F. Hoffmann, Image and Vision Computing, Volume 23, Issue 11, pp 943-955, October 2005
- [6] Human Machine Collaborative Systems for Microsurgical Applications, D. Kragic, P. Marayong, M. Li, A. M. Okamura, and G. D. Hager, International Journal of Robotic Research, Volume 24, Issue 9, 731-742, 2005.
- [5] <u>Vision for Robotic Object Manipulation in Domestic Settings,</u> D. Kragic, M. Bjorkman, H.I. Christensen and J-O. Eklundh, Robotics and Autonomous Systems, Volume 52, Issue 1, pp 85-100 July 2005.
- [4] Modeling, Specification and Robustness Issues for Robotic Manipulation Tasks, Danica Kragic, International Journal of Advanced Robotic Systems, Volume 1, Number 2, pp. 75-86, June, 2004.
- [3] Robust Visual Servoing, Danica Kragic, Henrik I Christensen, International Journal of Robotics Research, Volume 22, Number 10-11, pp 923-939, Oct-Nov 2003.
- [2] <u>Visually guided manipulation tasks</u>, Danica Kragic, Lars Petersson and Henrik I Christensen, Robotics and Autonomous Systems, vol. 40, Issue 2-3, pp.193-203, August, 2002.
- [1] <u>Cue Integration for Visual Servoing</u>, Danica Kragic, Henrik I Christensen, IEEE Transactions on Robotics and Automation, vol. 17(1), February, 2001.

PEER REVIEWED CONFERENCES AND WORKSHOPS

- [133] Grasp Moduli Spaces, F.T. Pokorny, K. Hang, D. Kragic, In *Robotics: Science and Sytems*, 2013.
- [132] <u>Sparse summarization of robotic grasping data, M. Hjelm, CH Ek, R. Detry, H. Kjellstrom, D. Kragic, In *IEEE International Conference on Robotics and Automation*, 2013.</u>
- [131] <u>Learning a dictionary of prototypical grasp-predicting parts from grasping experience</u>, R. Detry, M. Madry, CH Ek, D. Kragic, In *IEEE International Conference on Robotics and Automation*, 2013.
- [130] Language for learning complex human-object interactions, M. Patel, CH Ek, N. Kyriazis, A. Argyros, J.V. Miro, D. Kragic, In *IEEE International Conference on Robotics and Automation*, 2013.
- [129] Grasping Objects with Holes: A Topological Approach, F..T. Pokorny, J. Stork, D. Kragic) In

- IEEE International Conference on Robotics and Automation, 2013.
- [128] A probabilistic framework for task-oriented grasp stability assessment (Best Manipulation Paper Award) Y. Bekiroglu, D. Song, L. Wang, D. Kragic, In *IEEE International Conference on Robotics and Automation*, 2013.
- [127] Predicting human intention in visual observations of hand/object interactions, D. Song, N. Kyriazis, I. Oikonomidis, C. Papazov, A. Argyros, D Burschka, D. Kragic, In *IEEE International Conference on Robotics and Automation*, 2013.
- [126] Model-free robot manipulation of doors and drawers by means of fixed-grasps, Y. Karayiannidis, C. Smith, F. Vina, P. Ogren, D. Kragic, In *IEEE International Conference on Robotics and Automation*, 2013.
- [125] <u>Multi-agent average consensus control with prescribed performance guarantees</u>, Y. Karayiannidis, D.V. Dimarogonas, D. Kragic, In *IEEE Conference on Decision and Control*, 2012.
- [124] Persistent Homology for Learning Densities with Bounded Support, F.T. Pokorny, CH. Ek, H. Kjellstrom, D. Kragic, In NIPS: Neural Information Processing Systems, 2012.
- [123] <u>Topological Constraints and Kernel based Density Estimation</u>, F.T. Pokorny, CH. Ek, H. Kjellstrom, D. Kragic, In *NIPS: Neural Information Processing Systems, Workshop on Algebraic Topology and Machine Learning*, 2012.
- [122] <u>Adaptation of Sensorimotor Contingencies: Prism-Adaptation, a Case Study,</u> G. Kootstra, N. Wilming, N.M. Schmidt, M. Djurfeldt, D. Kragic, P. Konig, In *From Animals to Animats 12th International Conference on Simulation of Adaptive Behavior, SAB* 2012.
- [121] A Multi Objective Control approach to Online Dual Arm Manipulation, P. Ogren, C. Smith, Y. Karayiannidis, D. Kragic, IFAC Symposium on Robot Control, Syroco, 2012.
- [120] <u>Adaptive Force/Velocity Control for Opening Unknown Doors</u>, Y. Karayiannidis, C. Smith, P. Ogren, D. Kragic, IFAC Symposium on Robot Control, Syroco, 2012.
- [119] On-line Learning of Temporal State Models for Flexible Objects, N. Bergstrom, H. Ek, D Kragic, Y. Yamakawa, T. Senoo, M Ishikawa, In *Humanoids: IEEE-RAS International Conference on Humanoid Robotics*, 2012.
- [118] <u>Learning and Recognition of Objects Inspired by Early Cognition</u>, M. Rudinac, G. Kootstra, D. Kragic, P. Jonker, In *IEEE International Conference on Intelligent Robots and Systems*, 2012.
- [117] YES YEt Another Object Segmentation: Exploiting Camera Movement, L. Nalpantidis, M. Bjorkman, D. Kragic, In *IEEE International Conference on Intelligent Robots and Systems*, 2012.
- [116] <u>"Open Sesame!" Adaptive Force/Velocity Control for Opening Unknown Doors</u> (Finalist, Best Automation Paper Award) Y. Karayiannidis, C.C. Smith, F. Vina, P. Ogren, D. Kragic, In *IEEE International Conference on Intelligent Robots and Systems*, 2012.
- [115] Improving Generalization for 3D Object Categorization with Global Structure Histograms (Finalist, Best Cognitive Robotics Paper Award) M. Madry, CH Ek, R. Detry, K. Hang, D. Kragic, In *IEEE International Conference on Intelligent Robots and Systems*, 2012.

- [114] From Object Categories to Grasp Transfer Using Probabilistic Reasoning, M. Madry, D. Song, D. Kragic, In *IEEE International Conference on Robotics and Automation*, 2012.
- [113] <u>Generalizing Grasps Across Partly Similar Objects</u>, R. Detry, CH. Ek, M. Madry, J. Piater, D. Kragic, In *IEEE International Conference on Robotics and Automation*, 2012.
- [112] Cooperative Mobile Manipulation using a Multi-Agent Systems Theory Approach, J. Markdahl, Y. Karayiannidis, X. Hu, D. Kragic, In *IEEE International Conference on Robotics and Automation*, 2012.
- [111] Enhanced Visual Scene Understanding through Human-Robot Dialog, M. Johnson-Roberson, J. Bohg, G. Skantze, J. Gustavson, R. Carlsson, D. Kragic, In *IEEE/RSJ International Conference on Intelligent Robots and Systems* 2011. San Francisco, USA
- [110] <u>Learning Tactile Characterizations Of Object- And Pose-specific Grasps</u>, Y. Bekiroglu, R. Detry, D. Kragic, In *IEEE/RSJ International Conference on Intelligent Robots and Systems* 2011. San Francisco, USA
- [109] Grasping Unknown Objects using an Early Cognitive Vision System for General Scene Understanding (Finalist, Best Cognitive Robotics Paper Award) M. Popovic, G. Kootstra, D. Kragic, N. Krueger, In *IEEE/RSJ International Conference on Intelligent Robots and Systems* 2011. San Francisco, USA
- [108] Representing Actions with Kernels, G. Luo, N. Bergstrom, CH Ek, D. Kragic, In *IEEE/RSJ International Conference on Intelligent Robots and Systems* 2011. San Francisco, USA
- [107] Embodiment-Specific Representation of Robot Grasping using Graphical Models and Latent-Space Discretization, D. Song, CH Ek, K. Huebner, D. Kragic, In *IEEE/RSJ International Conference on Intelligent Robots and Systems* 2011. San Francisco, USA
- [106] Generating Object Hypotheses in Natural Scenes through Human-Robot Interaction (Best Cognitive Robotics Paper Award) N. Bergstrom, M. Bjorkman, D. Kragic, In *IEEE/RSJ International Conference on Intelligent Robots and Systems* 2011. San Francisco, USA
- [105] <u>Scene Understanding through Interactive Perception</u>, N. Bergstrom, CH Ek, M. Bjorkman, D. Kragic, In *International Conference on Vision systems, ICVS* 2011, Inria Sophia Antipolis, France
- [104] <u>Classification of Rigid and Deformable Objects Using a Novel Tactile Sensor</u>, A. Drimus, G. Kootstra, A. Bilberg, D. Kragic, In *IEEE International Conference on Advanced Robotics*, 2011, Tallinn, Estonia
- [103] <u>Virtual Visual Servoing for Real-Time Robot Pose Estimation</u>, X. Gratal, J. Romero, D. Kragic, In *18th IFAC World Congress* 2011, Milano, Italy
- [102] Fast and Bottom-Up Object Detection, Segmentation, and Evaluation using Gestalt Principles, G. Kootstra, D. Kragic, In *IEEE International Conference on Robotics and Automation*, 2011, Shanghai, China
- [101] Mind the Gap Robotic Grasping under Incomplete Observation, J. Bohg, M. Johnson-Roberson, B. Leon, J. Felip, X. Gratal Martinez, N. Bergström, D. Kragic, A. Morales, In *IEEE International Conference on Robotics and Automation*, 2011, Shanghai, China

- [100] Integrating Grasp Planning with Online Stability Assessment Using Tactile Sensing, Y. Bekiroglu, K. Huebner, D. Kragic, In *IEEE International Conference on Robotics and Automation*, 2011, Shanghai, China
- [99] <u>Multivariate Discretization for Bayesian Network Structure Learning in Robot Grasping</u>, D. Song, C.-H. Ek, K. Huebner, D. Kragic, In *IEEE International Conference on Robotics and Automation*, 2011, Shanghai, China
- [98] <u>Task Modeling in Imitation Learning using Latent Variable Models</u>, C.-H. Ek, D. Song, K. Huebner, D. Kragic, In *IEEE International Conference on Humanoid Robots*, 2010, Nashville, USA
- [97] Evaluation of Feature Representation and Machine Learning Methods in Grasp Stability Learning, J. Laaksonen, V. Kyrki, D. Kragic, In *IEEE International Conference on Humanoid Robots*, 2010, Nashville, USA
- [96] <u>Fast and Automatic Detection and Segmentation of Unknown Objects,</u> G. Kootstra, N. Bergstrom, D. Kragic, In *IEEE International Conference on Humanoid Robots*, 2010, Nashville, USA
- [95] Unsupervised Learning of Action Primitives, Sanmohan, V. Kruger, D. Kragic, In *IEEE International Conference on Humanoid Robots* 2010, Nashville, USA
- [94] Active 3D Segmentation through Fixation of Previously Unseen Objects, M. Bjorkman, D. Kragic, In *British Machine Vision Conference* 2010. Aberystwyth, UK
- [93] Enhanced Visual Scene Understanding through Human-Robot Dialog, M. Johnson-Roberson, J. Bohg, G. Skantze, D. Kragic, In *AAAI Fall Symposium* 2010. Arlington, USA
- [92] Learning grasp stability with tactile data and HMMs, Y. Bekiroglu, V. Kyrki, D. Kragic, In *IEEE International Symposium on Robot and Human Interactive Communication* 2010. Viareggio, Italy
- [91] Spatio-Temporal Modeling of Grasping Actions, J. Romero, T. Feix, H. Kjellstrom, D. Kragic, In *IEEE/RSJ International Conference on Intelligent Robots and Systems* 2010. Taipei, Taiwan
- [90] <u>Strategies for Multi-Modal Scene Exploration</u>, J. Bohg, M. Johnson-Roberson, M. Bjorkman, D. Kragic, In *IEEE/RSJ International Conference on Intelligent Robots and Systems* 2010. Taipei, Taiwan
- [89] Learning Task Constraints for Robot Grasping using Graphical Models, D. Song, K. Huebner, V. Kyrki, D. Kragic, In *IEEE/RSJ International Conference on Intelligent Robots and Systems* 2010. Taipei, Taiwan
- [88] <u>Attention based active 3D point cloud segmentation</u>, M. Johnson-Roberson, J. Bohg, M. Bjorkman, D. Kragic, In *IEEE/RSJ International Conference on Intelligent Robots and Systems* 2010. Taipei, Taiwan
- [87] Representations for Object Grasping and Learning from Experience, O. Rubio, K. Huebner, D. Kragic, In *IEEE/RSJ International Conference on Intelligent Robots and Systems* 2010. Taipei, Taiwan
- [86] Grasping by Parts: Robot Grasp Generation from 3D Box Primitives, K. Huebner, D. Kragic,

- In Proceedings of the 4th International Conference on Cognitive Systems (CogSys'10) 2010. Zurich, Switzerland
- [85] Learning Task Constraints in Robot Grasping, D. Song, K. Huebner, V. Kyrki, D. Kragic, In *Proceedings of the 4th International Conference on Cognitive Systems (CogSys'10)* 2010. Zurich, Switzerland
- [84] <u>Using Symmetry to Select Fixation Points for Segmentation</u>, G. Kootstra, N. Bergstrom, D. Kragic, In *International Conference on Pattern Recognition* 2010. Istanbul, Turkey
- [83] Tracking people interacting with objects, H. Kjellstrom, D. Kragic, M. Black, In *IEEE Conference on Computer Vision and Pattern Recognition* 2010. San Francisco, USA
- [82] Active 3D scene segmentation and detection of unknown objects, M. Bjorkman, D. Kragic, In *IEEE International Conference on Robotics and Automation* 2010. Anchorage, USA
- [81] Hands in Action: Real-Time 3D Reconstruction of Hands in Interaction with Objects, J. Romero, H. Kjellstrom, D. Kragic, In *IEEE International Conference on Robotics and Automation* 2010. Anchorage, USA
- [80] A comprehensive grasp taxonomy, T. Feix, R. Pawlik, H. Schmiedmayer, J. Romero, and D. Kragic, In RSS: Robotics, Science and Systems: Workshop on Understanding the Human Hand for Advancing Robotic Manipulation RSS'09, Seattle, USA
- [79] Grasp Recognition and Mapping on a Humandoid Robot, M. Do, R. Dillmann, T. Asfour, J. Romero, H. Kjellstrom, D. Kragic, In *Humanoids* 2009. Paris, France
- [78] Monocular Real-Time 3D Articulated Hand Pose Estimation, J. Romero, H. Kjellstrom, D. Kragic, In *Humanoids* 2009. Paris, France
- [77] Learning of 2D Grasping Strategies from Box-Based 3D Object Approximations, S. Geidenstam, K. Huebner, D. Banksell, D. Kragic, In *Robotics, Science and Systems*, 2009. RSS'09, Seattle, USA
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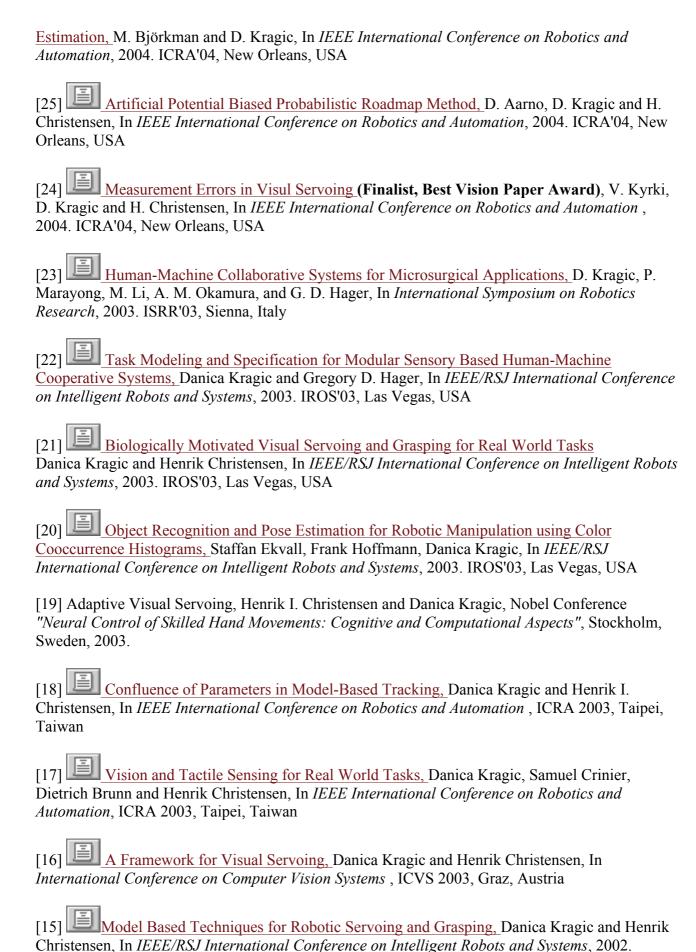
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