

Ulrik Pagh Schultz  
Mærsk Mc-Kinney Møller Institutet  
SDU Dronecenter  
**Postadresse:**  
Campusvej 55  
5230  
Odense M  
Danmark  
**E-mail:** ups@mmmi.sdu.dk  
**Fax:** 66157697  
**Telefon:** 65503570  
**Mobil:** 40797629  
**Hjemmeside:** <http://www.mmmi.sdu.dk/~ups>, <http://www.mmmi.sdu.dk/~ups>,  
<http://www.mmmi.sdu.dk/~ups>



## Scientific focus areas

Programming languages, modular robots, agricultural robots, domain-specific languages, program generation, distributed embedded systems, software architecture, spatial computing.

## Research projects

Currently a member of the Patient@Home, CARMEN projects, and LocoKit projects.  
Previously co-manager of the Modular Robotics Lab and co-applicant for the Morphing Production Lines project, member of the EU PalCom project, and manager of the ISIS Katrinebjerg B&O+OO project.

## Aktiviteter

### **ACM International Conference on Generative Programming - Steering Committee (Begivenhed)**

Ulrik Pagh Schultz (Formand)  
5. nov. 2019 → 5. nov. 2022

### **Leader: Work Package 4 on Case Studies of ICT COST Action IC1405 (Ekstern organisation)**

Ulrik Pagh Schultz (Formand)  
1. jun. 2015 → 31. maj 2019

### **Management Committee of ICT COST Action IC1405 (Ekstern organisation)**

Ulrik Pagh Schultz (Medlem)  
1. jun. 2015 → 31. maj 2019

### **General Chair: The 13th ACM International Conference on Generative Programming: Concepts and Experiences (GPCE'14) (Ekstern organisation)**

Ulrik Pagh Schultz (Formand)  
27. okt. 2013 → 16. sep. 2014

### **12th ACM International Conference on Generative Programming (Begivenhed)**

Ulrik Pagh Schultz (Medlem)  
14. jun. 2013 → 27. okt. 2013

### **Chair: IFIP TC-2 working group on Program Generation (WG 2.11) (Ekstern organisation)**

Ulrik Pagh Schultz (Formand)  
6. jun. 2013 → 6. jun. 2017

### **PC member: ACM Symposium on Applied Computing 2014, Languages Track (ACM SAC'14) (Ekstern organisation)**

Ulrik Pagh Schultz (Medlem)  
13. maj 2013 → 24. mar. 2014

**PC Member: Spatial Computing Workshop 2013 (SCW 2013) (Ekstern organisation)**

Ulrik Pagh Schultz (Medlem)  
22. feb. 2013 → 5. jun. 2013

**Co-Chair: Workshops at SPLASH 2013 (Systems, Programming, Languages and Applications: Software for Humanity) (Ekstern organisation)**

Ulrik Pagh Schultz (Formand)  
26. okt. 2012 → 31. okt. 2013

**Member: Steering Committee for The ACM International Conference on Generative Programming: Concepts & Experiences (GPCE) (Ekstern organisation)**

Ulrik Pagh Schultz (Medlem)  
27. sep. 2012 → 27. sep. 2016

**11th International Conference on Generative Programming and Component Engineering (Begivenhed)**

Ulrik Pagh Schultz (Medlem)  
30. apr. 2012 → 26. sep. 2012

**PC Member: Spatial Computing Workshop 2012 (SCW 2012) (Ekstern organisation)**

Ulrik Pagh Schultz (Medlem)  
4. mar. 2012 → 5. jun. 2012

**Co-Chair: Workshops at SPLASH 2012 (Systems, Programming, Languages and Applications: Software for Humanity) (Ekstern organisation)**

Ulrik Pagh Schultz (Formand)  
27. okt. 2011 → 26. okt. 2012

**Co-Chair: Workshops at SPLASH 2011 (Systems, Programming, Languages and Applications: Software for Humanity) (Ekstern organisation)**

Ulrik Pagh Schultz (Formand)  
21. okt. 2010 → 27. okt. 2011

**10th International Conference on Generative Programming and Component Engineering (Begivenhed)**

Ulrik Pagh Schultz (Formand)  
13. okt. 2010 → 22. okt. 2011

## Publikationer

**Increasing safety by combining multiple declarative rules in robotic perception systems**

Ingbergsson, J. T. M., Kraft, D. & Schultz, U. P., 13. apr. 2019, *Cyber Physical Systems. Design, Modeling, and Evaluation: 7th International Workshop, CyPhy 2017, Revised Selected Papers*. Chamberlain, R., Taha, W. & Törngren, M. (red.). Springer VS, s. 43-60 (Lecture Notes in Computer Science, Bind 11267).

**Adapting Parameterized Motions using Iterative Learning and Online Collision Detection**

Laursen, J. S., Sørensen, L. C., Schultz, U. P., Ellekilde, L-P. & Kraft, D., 13. sep. 2018, *Proceeding of the 2018 IEEE International Conference on Robotics and Automation*. IEEE, s. 7587-7594

**A Survey of Open-Source UAV Flight Controllers and Flight Simulators**

Ebeid, E. S. M., Skriver, M., Terkildsen, K. H., Jensen, K. & Schultz, U. P., 1. sep. 2018, I : *Microprocessors and Microsystems*. 61, s. 11-20

**Message from the IRC 2018 program co-chairs**

Chang, C. M., MacDonald, B., Matson, E. & Schultz, U. P., 2. apr. 2018, I : *Proceedings - 2nd IEEE International Conference on Robotic Computing, IRC 2018*. 2018-January, s. xv

**Reversible object-oriented programming with region-based memory management: Work-in-progress report**

Schultz, U. P., jan. 2018, *Proceedings of the 10th International Conference on Reversible Computation*. Kari, J. & Ulidowski, I. (red.). Springer VS, s. 322-328 (Lecture Notes in Computer Science, Bind 11106).

**Experience report: Studying the readability of a domain specific language**

Ingibergsson, J. T. M., Hanenberg, S., Sunshine, J. & Schultz, U. P., 2018, *Proceedings of the 33rd Annual ACM Symposium on Applied Computing*. Association for Computing Machinery, Bind Part F137816. s. 2030-2033

**Modelling reversible execution of robotic assembly**

Laursen, J. S., Ellekilde, L. P. & Schultz, U. P., 2018, I : *Robotica*. 36, 5, s. 625-654

**Declarative Rule-based Safety for Robotic Perception Systems**

Mogensen, J. T. I., Kraft, D. & Schultz, U. P., 2017, I : *Journal of Software Engineering for Robotics*. 8, 1, s. 17-31

**DSLs in robotics: A case study in programming self-reconfigurable robots**

Schultz, U. P., Bordignon, M., Stoy, K., Nordmann, A., Hochgeschwender, N. & Wrede, S., 2017, *Grand Timely Topics in Software Engineering: International Summer School GTTSE 2015, Tutorial Lectures*. Cunha, J., Fernandes, J. P., Lämmel, R., Saraiva, J. & Zaytsev, V. (red.). Springer, s. 98-123 (Lecture Notes in Computer Science, Bind 10223).

**Explicit Image Quality Detection Rules for Functional Safety in Computer Vision**

Mogensen, J. T. I., Kraft, D. & Schultz, U. P., 2017, *Proceedings of the 12th International Joint Conference on Computer Vision, Imaging and Computer Graphics Theory and Applications*. Institute for Systems and Technologies of Information, Control and Communication, Bind 6. s. 433-444

**HELENA stage 2—danish overview**

Tell, P., Pfeiffer, R. H. & Schultz, U. P., 2017, *Product-Focused Software Process Improvement: 18th International Conference, PROFES 2017, Innsbruck, Austria, November 29–December 1, 2017, Proceedings*. Felderer, M., Méndez Fernández, D., Turhan, B., Kalinowski, M., Sarro, F. & Winkler, D. (red.). Springer, s. 420-427 (Lecture Notes in Computer Science, Bind 10611).

**Message from the workshop chairs**

Yallop, J. & Schultz, U. P., 2017, *Proceedings of the 2017 ACM SIGPLAN Workshop on Partial Evaluation and Program Manipulation*. Schultz, U. & Yallop, J. (red.). Association for Computing Machinery, s. iii 1 s.

**Safety Computer Vision Rules for Improved Sensor Certification**

Mogensen, J. T. I., Kraft, D. & Schultz, U. P., 2017, *Proceedings of the First IEEE International Conference on Robotic Computing (IRC)*. IEEE, s. 89-92

**Special Issue on the 2015 International Conference on Generative Programming: Concepts & Experiences (GPCE)**

Gokhale, A., Asai, K. & Schultz, U. P., 2017, I : *Computer Languages, Systems and Structures*. 48, s. 1-2

**Rule-based Dynamic Safety Monitoring for Mobile Robots**

Adam, M. S., Larsen, M., Jensen, K. & Schultz, U. P., jul. 2016, I : *Journal of Software Engineering for Robotics*. 7, 1, s. 120-141

**Automatic code generation in practice: experiences with embedded robot controllers**

Adam, M. S., Kuhrmann, M. & Schultz, U. P., 2016, *Proceedings of the ACM SIGPLAN International Conference on Generative Programming: Concepts and Experiences*. Association for Computing Machinery, s. 104-108

**Drone Identification and Tracking in Denmark**

Jensen, K., Skriver, M. & Schultz, U. P., 2016, Syddansk Universitet. Mærsk Mc-Kinney Møller Institut. 56 s.

**Elements of a Reversible Object-Oriented Language: Work-in-Progress Report**

Schultz, U. P. & Axelsen, H. B., 2016, *Reversible Computation: Proceedings of the 8th Conference on Reversible Computation*. Devitt, S. & Lanese, I. (red.). Springer, s. 153-159 (Lecture Notes in Computer Science, Bind 9720).

#### **Low-cost modular robotic system for neurological rehabilitative training**

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

#### **Towards a Virtual Machine Approach to Resilient and Safe Mobile Robots**

Adam, M. S., Kuhrmann, M. & Schultz, U. P., 2016, *Proceedings of the 21st IEEE International Conference on Emerging Technology and Factory Automation*. IEEE Press, 8 s. (I E E E International Conference on Emerging Technologies and Factory Automation. Proceedings).

#### **On the Use of Safety Certification Practices in Autonomous Field Robot Software Development: A Systematic Mapping Study**

Mogensen, J. T. I., Schultz, U. P. & Kuhrmann, M., 1. dec. 2015, *Product-Focused Software Process Improvement: Proceedings of the 16th International Conference on Product-Focused Software Process Improvement*. Abrahamsson, P., Corral, L., Oivo, M. & Russo, B. (red.). Springer, s. 335-352 (Lecture Notes in Computer Science, Bind 9459).

#### **Towards tool support for spreadsheet-based domain-specific languages**

Adam, M. S. & Schultz, U. P., 26. okt. 2015, *Proceedings of the 2015 ACM SIGPLAN International Conference on Generative Programming: Concepts and Experiences*. Association for Computing Machinery, s. 95-98

#### **Automatic Error Recovery in Robot Assembly Operations Using Reverse Execution**

Laursen, J. S., Schultz, U. P. & Ellekilde, L-P., 29. sep. 2015, *Proceedings of the 2015 IEEE/RSJ International Conference on Intelligent Robots and Systems*. IEEE, s. 1785-1792

#### **Towards a DSL for Perception-Based Safety Systems**

Mogensen, J. T. I., Suvei, S-D., Hansen, M. K., Christiansen, M. P. & Schultz, U. P., 28. sep. 2015. 2 s.

#### **Towards Declarative Safety Rules for Perception Specification Architectures**

Mogensen, J. T. I., Schultz, U. P. & Kraft, D., 28. sep. 2015, *Proceedings of 6th International Workshop on Domain-Specific Languages and models for Robotic systems (DSLRob-15)*. 4 s.

#### **Information and communication technology (ICT) assisted intervention at home for patients with Cervical Radiculopathy: MAST evaluation of a pilot study**

Rasmussen, H., Kjaer, P., Schultz, U. P. & Bondy, J., 31. aug. 2015, 8 s.

#### **Towards a Domain-Specific Language for Reversible Assembly Sequences**

Schultz, U. P., Laursen, J. S., Ellekilde, L-P. & Axelsen, H. B., 2015, *Reversible Computation: 7th International Conference, RC 2015, Grenoble, France, July 16-17, 2015, Proceedings*. Krivine, J. & Stefani, J-B. (red.). Springer, s. 111-126 (Lecture Notes in Computer Science, Bind 9138).

#### **Applying Simulation and a Domain-Specific Language for an Adaptive Action Library**

Buch, J. P., Laursen, J. S., Sørensen, L. C., Ellekilde, L-P., Kraft, D., Schultz, U. P. & Petersen, H. G., 20. okt. 2014, *Simulation, Modeling, and Programming for Autonomous Robots*. Brugali, D., Broenink, J. F., Kroeger, T. & MacDonald, B. A. (red.). Springer, Bind 8810. s. 86-97 (Lecture Notes in Computer Science, Bind 8810).

#### **Towards Rule-Based Dynamic Safety Monitoring for Mobile Robots**

Adam, M. S., Larsen, M., Jensen, K. & Schultz, U. P., 20. okt. 2014, *Simulation, Modeling, and Programming for Autonomous Robots: 4th International Conference, SIMPAR 2014, Bergamo, Italy, October 20-23, 2014. Proceedings*. Brugali, D., Broenink, J. F., Kroeger, T. & MacDonald, B. A. (red.). Springer, s. 207-218 (Lecture Notes in Computer Science, Bind 8810).

#### **Towards Interactive, Incremental Programming of ROS Nodes**

Adam, M. S. & Schultz, U. P., okt. 2014. 5 s.

#### **Towards automatic consistency checking of software components in field robotics**

Larsen, M., Adam, M. S., Schultz, U. P. & Jørgensen, R., 21. maj 2014, *Proceedings of the Second International Conference on Robotics, Associated High-Technologies and Equipment for Agriculture and Forestry: New trends in mobile robotics, perception and actuation for agriculture and forestry*. Gonzalez-de-Santos, P. & Ribeiro, A. (red.). s. 409-418 10 s.

#### **Towards Error Handling in a DSL for Robot Assembly Tasks**

Laursen, J. S., Buch, J. P., Sørensen, L. C., Kraft, D., Petersen, H. G., Ellekilde, L-P. & Schultz, U. P., 2014. 5 s.

#### **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, s. 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 s.

#### **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, s. 3899-3906

#### **Supply chain simulation as innovative planning method for sustainable growth**

Liotta, G., Tanev, S., Gerstlberger, W., Schultz, U. P. & Bogers, M., 16. jun. 2013, *Proceedings of the XXIV ISPIM Conference "Innovating in Global Markets: Challenges for Sustainable Growth"*. 15 s.

#### **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. maj 2013. 4 s.

#### **Towards Python-based Domain-specific Languages for Self-reconfigurable Modular Robotics Research**

Moghadam, M., Johan Christensen, D., Brandt, D. & Schultz, U. P., 22. feb. 2013, *Proceedings of the International Workshop on Domain-Specific Languages for Robotics*. 6 s.

#### **Proceedings of the Third International Workshop on Domain-Specific Languages and Models for Robotic Systems (DSLRob 2012)**

Schlegel, C., Schultz, U. P. & Stinckwich, S., 20. feb. 2013. 1 s.

#### **A distributed and morphology-independent strategy for adaptive locomotion in self-reconfigurable modular robots**

Christensen, D. J., Schultz, U. P. & Støy, K., 2013, *I: Robotics and Autonomous Systems*. 61, 9, s. 1021 - 1035

#### **SPLASH'13 workshops summary: SPLASH 2013 - Proceedings of the 2013 Companion Publication for Conference on Systems, Programming, and Applications: Software for Humanity**

Balzer, S. & Schultz, U. P., 2013, *SPLASH 2013 - Proceedings of the 2013 Companion Publication for Conference on Systems, Programming, and Applications: Software for Humanity*. Association for Computing Machinery, s. 177-178

#### **Towards a General-Purpose, Reversible Language for Controlling Self-reconfigurable Robots**

Schultz, U. P., 2013, *Reversible Computation: 4th International Workshop, RC 2012, Copenhagen, Denmark, July 2-3, 2012. Revised Papers*. Glück, R. & Yokoyama, T. (red.). Springer, s. 97-111 (Lecture Notes in Computer Science, Bind 7581).

#### **Proceedings of the Second International Workshop on Domain-Specific Languages and Models for Robotic Systems (DSLRob 2011)**

Schultz, U. P. & Stinckwich, S., 10. dec. 2012, DSLRob-11. (Proceedings of the International Workshop on Domain-Specific Languages for Robotics).

#### **Using Scheme to Control Simulated Modular Robots**

Schultz, U. P., 9. sep. 2012, *Proceedings of the 2012 Workshop on Scheme and Functional Programming*. Association for Computing Machinery, 6 s.

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

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

#### **Programming Language Abstractions for Self-Reconfigurable Robots**

Schultz, U. P., 2012, *Proceedings of the 3rd annual conference on Systems, programming, and applications: software for humanity*. Association for Computing Machinery, s. 69-70

#### **Generalized programming of modular robots through kinematic configurations**

Bordignon, M., Støy, K. & Schultz, U. P., 2011. 7 s.

#### **Model-based Kinematics Generation for Modular Mechatronic Toolkits**

Bordignon, M., Schultz, U. P. & Stoy, K., 2011, I : A C M / S I G P L A N Notices. 46, 2, s. 157-166 10 s.

#### **Robust and reversible execution of self-reconfiguration sequences**

Schultz, U. P., Bordignon, M. & Støy, K., 2011, I : Robotica. 29, s. 35-57

#### **Spatial Computing: Distributed Systems That Take Advantage of Our Geometric World**

Beal, J., Michel, O. & Schultz, U. P., 2011, I : A C M Transactions on Autonomous and Adaptive Systems. 6, 2, 3 s.

#### **A Distributed Strategy for Gait Adaptation in Modular Robots**

Christensen, D. J., Schultz, U. P. & Støy, K., 2010, I : I E E E International Conference on Robotics and Automation. Proceedings. s. 2765 - 2770 6 s.

#### **Fractal gene regulatory networks for robust locomotion control of modular robots**

Zahadat, P., Christensen, D. J., Schultz, U. P., Katebi, S. & Støy, K., 2010, I : Lecture Notes in Computer Science. 6226, s. 544-554

#### **Model-based Kinematics Generation for Modular Mechatronic Toolkits**

Bordignon, M., Schultz, U. P. & Støy, K., 2010, *Proceedings of the 9th ACM SIGPLAN/SIGSOFT International Conference on Generative Programming and Component Engineering (GPCE'10)*. Association for Computing Machinery, 10 s.

#### **On the Efficiency of Local and Global Communication in Modular Robots**

Garcia, R. F. M., Schultz, U. P. & Støy, K., 15. dec. 2009, *Proceedings of the IEEE/RSJ 2009 International Conference on Intelligent Robots and Systems : IROS2009*. IEEE, s. 1502-1508

#### **A Virtual Machine-Based Approach for Fast and Flexible Reprogramming of Modular Robots**

Bordignon, M., Støy, K. & Schultz, U. P., 2009, *Proceedings. International Conference on Robotics and Automation (ICRA)*

#### **Elements of a Development Ecosystem for Modular Robot Applications**

Bordignon, M., Christensen, D. J., Støy, K. & Schultz, U. P., 2009, *Proceedings of the Fourth International Workshop on Software Development and Integration in Robotics (SDIR 2009)*.

#### **Exploit morphology to simplify docking of self-reconfigurable robots**

Støy, K., Christensen, D. J., Brandt, D., Bordignon, M. & Schultz, U. P., 2009, *Distributed Autonomous Robotic Systems 8*. Springer, s. 441-452

### **Morphology Independent Learning in Modular Robots**

Christensen, D. J., Bordignon, M., Schultz, U. P., Shaikh, D. & Støy, K., 2009, *Proceedings of the International Symposium on Distributed Autonomous Robotic Systems*. Asama, H., Kurokawa, H., Ota, J. & Sekiyama, K. (red.). Springer, s. 379-391 12 s.

### **Robust and Reversible Self-Reconfiguration**

Schultz, U. P., Bordignon, M. & Støy, K., 2009, *Proceedings of the 2009 IEEE/RSJ International Conference on Intelligent Robots and Systems*. IEEE Press, s. 5287-5294 8 s.

### **Spatial Computing with Labels**

Schultz, U. P., Bordignon, M., Christensen, D. J. & Støy, K., 2009, *Proceedings of the 2008 Second IEEE International Conference on Self-Adaptive and Self-Organizing Systems Workshops*. IEEE Press, s. 326-331

### **A Unified Simulator for Self-Reconfigurable Robots**

Christensen, D. J., Brandt, D., Støy, K. & Schultz, U. P., 2008, *Proceedings of the 2008 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2008)*. IEEE Press, s. 870-876

### **Flexible, fpga-based electronics for modular robots**

Brandt, D., Larsen, J. C., Christensen, D. J., Garcia, R. F. M., Shaikh, D., Schultz, U. P. & Støy, K., 2008, *Proceedings of the IROS Workshop on Self-Reconfigurable Robots, Systems and Applications*. 5 s.

### **Implementing Flexible Parallelism for Modular Self-reconfigurable Robots**

Bordignon, M., Mikkelsen, L. L. & Schultz, U. P., 2008, I : *Lecture Notes in Computer Science*. s. 123-134 12 s.

### **Optimal Lambda Lifting in Quadratic Time**

Morazán, M. T. & Schultz, U. P., 2008, I : *Lecture Notes in Computer Science*. s. 37-56

### **Technological Visions for Interactive and Adaptive Furniture**

Støy, K., Schultz, U. P. & Christensen, D. J., 2008. 3 s.

### **Towards Interactive Programming of Modular Robots**

Bordignon, M., Støy, K., Christensen, D. J. & Schultz, U. P., 2008, *IROS Workshop on Self-Reconfigurable Robots & Systems and Applications: Schedule and papers*. IROS

### **Flexible Language Interoperability**

Ekman, T., Mechlenborg, P. & Schultz, U. P., 1. sep. 2007, I : *Journal of Object Technology*. 6, 8, s. 95-116 22 s.

### **A Domain-Specific Language for Programming Self-Reconfigurable Robots**

Schultz, U. P., Christensen, D. J. & Støy, K., 2007, *APGES 2007 - Automatic Program Generation for Embedded Systems - Workshop Proceedings*. s. 28-36 9 s.

### **Distributed Control Diffusion: Towards a Flexible Programming Paradigm for Modular Robots**

Schultz, U. P., 2007, *Proceedings of First International Conference on Robot Communication and Coordination (ROBOCOMM)*. 9 s.

### **Neighbor Detection and Crosstalk Elimination in Self-Reconfigurable Robots**

Christensen, D. J., Brandt, D., Schultz, U. P. & Støy, K., 2007, *Proceedings of First International Conference on Robot Communication and Coordination (ROBOCOMM)*. 8 s.

### **Roles and Self-Reconfigurable Robots**

Dvinge, N., Schultz, U. P. & Christensen, D. J., 2007, *ROLES'07 - Proceedings of the 2nd Workshop on Roles and Relationships in Object Oriented Programming, Multiagent Systems and Ontologies*. s. 17-26 10 s. (Forschungsberichte der Fakultät IV - Elektrotechnik und Informatik; Nr. 2007-9).

### **Architectural Support for Programming Languages and Operating Systems**

Lawall, J. L., Probst, C. W. & Schultz, U. P., 2006, *Proceedings of the 3rd workshop on Programming languages and operating systems: linguistic support for modern operating systems*. Association for Computing Machinery, 12 s.

### **Supporting transparent evolution of component interfaces**

Lins, E. P. & Schultz, U. P., 2006, *Proceedings of the 2006 ACM symposium on Applied computing*. Association for Computing Machinery, s. 1629-1630 2 s.

### **A Unification of Inheritance and Automatic Program Specialization**

Schultz, U. P., 2004, *Generative Programming and Component Engineering*. Karsai, G. & Visser, E. (red.). Springer, s. 244-265 (Lecture Notes in Computer Science, Bind 3286).

### **Architecture Presentations: Experiences from Pervasive Computing Projects at Computer Science Department, University of Aarhus**

Christensen, H. B., Hansen, K. M., Schultz, U. P., Ørbæk, P. & Bouvin, N. O., 2004, I : Electronic Colloquium on Computational Complexity. CfPC 2004-PB-59

### **Declarative Specialization for Object-Oriented-Program Specialization**

Andersen, H. M. & Schultz, U. P., 2004, *Proceedings of the 2004 ACM Symposium on Partial Evaluation and Semantics-Based Program Manipulation (PEPM'04)*. Association for Computing Machinery, s. 27-38

### **Distance-Based Access Modifiers Applied to Safety in Home Networks**

Mortensen, K. H., Schultz, U. P. & Nørgaard, K. R. S., 2004, I : Lecture Notes in Computer Science. 3295, s. 315-326

### **Lambda-Lifting in Quadratic Time**

Danvy, O. & Schultz, U. P., 2004, I : Journal of Functional and Logic Programming. 1, 1, 43 s.

### **Supporting Activity-Based Computing using Dynamically (De)Composable Mobile Applications**

Schultz, U. P. & Schougaard, K. R., 2004, *Proceedings of First International Workshop on Computer Support for Human Tasks and Activities*. Bardram, J. E., Christensen, H. B., Garlan, D. & Sousa, J. P. (red.). Bind CfPC-2004-PB-60. s. 12-16 5 s.

### **Automatic Program Specialization for Java**

Schultz, U. P., Lawall, J. L. & Consel, C., 1. maj 2003, I : ACM Transactions on Programming Languages and Systems. 25, 4, s. 452-499

### **A Programming Language Approach to Safety in Home Networks**

Mortensen, K. H., Schougaard, K. R. & Schultz, U. P., 2003, Århus, 23 s.

### **Compiling Java for low-end embedded systems**

Schultz, U. P., Burgaard, K., Christensen, F. G. & Knudsen, J. L., 2003, *Proceedings of the 2003 ACM SIGPLAN Conference on Languages, Compilers, and Tools for Embedded Systems (LCTES'03)*. Association for Computing Machinery, s. 42-50

### **POMP - Pervasive Object Model Project**

Schougaard, K. R. & Schultz, U. P., 2003, *ECOOP 2003 Workshop on Resource Aware Computing*. Bryce, C. & Czajkowski, G. (red.). Springer, 6 s.

### **Lambda-Lifting in Quadratic Time**

Danvy, O., Schultz, U. P., Hu, Z. (red.) & Rodríguez-Artalejo, M. (red.), 2002, *FLOPS 2002: Functional and Logic Programming*. 2441 of Lecture Notes in Computer Science udg. Springer, Bind 2441 LNCS. s. 134-151 18 s.



### **Towards unifying inheritance and automatic program specialization**

Schultz, U. P., 2002, I : Aarhus Universitet. Institut for Matematiske Fag. Datalogisk Afdeling. P B. 566, 31 s.

### **Object-oriented program specialization: Aspects into Aspects - or maybe not?**

Schultz, U. P., 2001, *European Conference on Object Oriented Programming: Object-Oriented Technology. ECOOP 2001 Workshop Reader ECOOP 2001 Workshops, Panel, and Posters. Workshop on Generative Programming. WGP'01.* Springer, s. 4

### **Partial Evaluation for Class-Based Object-Oriented Languages**

Schultz, U. P., Danvy, O. (red.) & Filinski, A. (red.), 2001, *Lecture Notes In Computer Science: Proceedings of the Second Symposium on Programs as Data Objects.* Lecture Notes in Computer Science 2053 udg. Springer, Bind 2053. s. 173-197 25 s.

### **Specialization patterns**

Schultz, U. P., Lawall, J. & Consel, C., sep. 2000, *Proceedings of the 15th IEEE International Conference on Automated Software Engineering (ASE'00).* IEEE, s. 197-206

### **Lambda-dropping: Transforming recursive equations into programs with block structure**

Danvy, O. & Schultz, U. P., 2000, I : Theoretical Computer Science. 248, 1-2, s. 243-287

### **Towards automatic specialization of Java programs**

Schultz, U. P., Lawall, J., Consel, C. & Muller, G., jun. 1999, *Proceedings of the European Conference on Object-oriented Programming (ECOOP'99).* Springer, Bind 1628. s. 367-390 (Lecture Notes in Computer Science).

### **Harissa: A hybrid approach to Java execution**

Muller, G. & Schultz, U. P., mar. 1999, I : IEEE Software. s. 44-51

### **Lambda-dropping: Transforming recursive equations into programs with block structure**

Danvy, O. & Schultz, U. P., jun. 1997, *Proceedings of the 1997 ACM SIGPLAN Symposium on Partial Evaluation and Semantics-Based Program Manipulation (PEPM'97).* Association for Computing Machinery, s. 90-106