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## Kwalificaties

Biped locomotion: stability analysis, gait generation and control, National University of Singapore  
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## Tewerkstellingen

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Electronic Systems  
Technische Universiteit Eindhoven  
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### Embedded Control Systems Lab

Technische Universiteit Eindhoven  
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### CompSOC Lab- Predictable & Composable Embedded Systems

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Eindhoven, Nederland  
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## Onderzoeksoutput

### Parallel Shooting Sequential Quadratic Programming for Nonlinear MPC Problems

Verheijen, P. C. N., Haghi, M., Lazar, M. & Goswami, D., 22 sep. 2023, *2023 IEEE Conference on Control Technology and Applications, CCTA 2023*. Institute of Electrical and Electronics Engineers, blz. 605-611 7 blz. 10252893

### **Improved Positioning Precision using a Multi-rate Multi-sensor in Industrial Motion Control Systems**

Jugade, C., Hartgers, D., Mohamed, S., Goswami, D., Nelson, A. T., van der Veen, G. & Goossens, K. G. W., 17 jul. 2023 , *2023 European Control Conference (ECC)*. Institute of Electrical and Electronics Engineers, blz. 1-8 8 blz. 10178138

### **An Evaluation Framework for Vision-in-the-Loop Motion Control Systems**

Jugade, C., Hartgers, D., Anh, P. D., Mohamed, S., Haghi, M., Goswami, D., Nelson, A., van der Veen, G. & Goossens, K., 25 okt. 2022, *IEEE 27th International Conference on Emerging Technologies and Factory Automation (ETFA)*. Institute of Electrical and Electronics Engineers, 4 blz. 9921640

### **State-based switching multi-rate controller for improving resource utilization on predictable and composable platforms**

Haghi, M. (Corresponding author), Yu, S., Goswami, D., Goossens, K., Koedam, M. & Nelson, A., jun. 2022, In: *Microprocessors and Microsystems*. 91, 17 blz., 104517.

### **Delay-aware Multi-layer Multi-rate Model Predictive Control for Vehicle Platooning under Message-rate Congestion Control**

Ibrahim, A. M. E. (Corresponding author), Goswami, D., Li, H. & Basten, A. A., 22 apr. 2022, In: *IEEE Access*. 10, blz. 44583-44607 25 blz.

### **Analyzable Publish-Subscribe Communication Through a Wait-Free FIFO Channel for MPSoC Real-Time Applications**

Dehnavi, S., Goswami, D. & Goossens, K., 4 feb. 2022, *Proceedings - 2021 IEEE 14th International Symposium on Embedded Multicore/Many-Core Systems-on-Chip, MCSoc 2021*. Institute of Electrical and Electronics Engineers, blz. 388-395 8 blz. 9691975

### **Efficient Implementation and Sampling Period Analysis of MPC for Water Distribution Networks**

Verheijen, P. C. N., Lazar, M. & Goswami, D., 2022, In: *IFAC-PapersOnLine*. 55, 33, blz. 42-47 6 blz.

### **CompROS: A composable ROS2 based architecture for real-time embedded robotic development**

Dehnavi, S., Koedam, M., Nelson, A., Goswami, D. & Goossens, K., 16 dec. 2021, *2021 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*. Institute of Electrical and Electronics Engineers, blz. 6449-6455 7 blz. 9636590

### **Design and management of image processing pipelines within CPS: Acquired experience towards the end of the FitOptiVis ECSEL Project**

Sau, C. (Corresponding author), Rinaldi, C., Pomante, L., Palumbo, F., Valente, G., Fanni, T., Martinez, M., van der Linden, F., Basten, T., Geilen, M., Peeren, G., Kadlec, J., Jääskeläinen, P., Bulej, L., Barranco, F., Saarinen, J., Säntti, T., Zedda, M. K., Sanchez, V. & Nikkhah, S. T. & 7 anderen, Goswami, D., Amat, G., Maršik, L., van Helvoort, M., Medina, L., Al-Ars, Z. & de Beer, A., nov. 2021, In: *Microprocessors and Microsystems*. 87, 23 blz., 104350.

### **A Deployment Framework for Quality-Sensitive Applications in Resource-Constrained Dynamic Environments**

Tabatabaei Nikkhah, S., Geilen, M. C. W., Goswami, D., Koedam, M. L. P. J., Nelson, A. T. & Goossens, K. G. W., 11 okt. 2021, *2021 24th Euromicro Conference on Digital System Design (DSD)*. Leporati, F., Vitabile, S. & Skavhaug, A. (redacties). Institute of Electrical and Electronics Engineers, blz. 212-220 9 blz. 9556434

### **Reconfigurable pipelined control systems**

Medina Sanchez, R., Nikkhah, S. T., Goswami, D. (Corresponding author), Heemels, M., Stuijk, S. & Basten, T., okt. 2021 , In: *IEEE Design & Test* . 38, 5, blz. 17-24 8 blz.

### **Hardware- and Situation-Aware Sensing for Robust Closed-Loop Control Systems**

De, S., Huang, Y., Mohamed, S., Goswami, D. & Corporaal, H., 16 jul. 2021, *Proceedings of the 2021 Design, Automation and Test in Europe, DATE 2021*. Institute of Electrical and Electronics Engineers, blz. 1751-1756 6 blz. 9474216

### **Modeling, implementation, and analysis of XRCE-DDS applications in distributed multi-processor real-time embedded systems**

Dehnavi, S., Goswami, D., Koedam, M., Nelson, A. & Goossens, K., 16 jul. 2021, *2021 Design, Automation & Test in Europe Conference & Exhibition (DATE)*. Institute of Electrical and Electronics Engineers, blz. 1148-1151 4 blz. 9474221

### **Multi-layer multi-rate model predictive control for vehicle platooning under IEEE 802.11p**

Ibrahim, A. M. E. (Corresponding author), Goswami, D., Li, H., Martin Soroa, I. & Basten, A. A., mrt. 2021, In: Transportation Research. Part C: Emerging Technologies. 124, 34 blz., 102905.

### **Adaptive predictive control for pipelined multiprocessor image-based control systems considering workload variations**

Mohamed, S., Saraf, N., Bernardini, D., Goswami, D., Basten, A. A. & Bemporad, A., 11 jan. 2021, *59th IEEE Conference on Decision and Control (CDC 2020)*. Institute of Electrical and Electronics Engineers, blz. 5236-5242 7 blz. 9303827

### **Matlab2Trace: A Matlab to Trace translator to visualise and analyse concurrent system activities and execution traces**

Mohamed, S., Goswami, D. & Basten, A. A., 2021. 1 blz.

### **Optimizing multiprocessor image-based control through pipelining and parallelism**

Mohamed, S. (Corresponding author), Goswami, D., De, S. & Basten, T., 2021, In: IEEE Access. 9, blz. 112332-112358 27 blz., 9508439.

### **Design and management of image processing pipelines within CPS: 2 years of experience from the FitOptiVis ECSEL Project**

Pomante, L., Palumbo, F., Rinaldi, C., Valente, G., Sau, C., Fanni, T., van der Linden, F., Basten, T., Geilen, M., Peeren, G., Kadlec, J., Jaaskelainen, P., Martinez, M., Saarinen, J., Santti, T., Zedda, M. K., Sanchez, V., Goswami, D., Al-Ars, Z. & de Beer, A., 8 okt. 2020, *2020 23rd Euromicro Conference on Digital System Design (DSD)*. Trost, A., Zemva, A. & Skavhaug, A. (redacties). Institute of Electrical and Electronics Engineers, blz. 378-385 8 blz. 9217819

### **Firmness Analysis of Real-time Tasks**

Behrouzian, A., Ara, H. A., Geilen, M., Goswami, D. & Basten, T., jul. 2020, In: ACM Transactions on Embedded Computing Systems. 19, 4, 24 blz., 26.

### **Approximation Trade Offs in an Image-Based Control System**

De, S., Mohamed, S., Bimpisidis, K., Goswami, D., Basten, T. & Corporaal, H., 15 jun. 2020, *2020 Design, Automation and Test in Europe Conference and Exhibition (DATE)*. Di Natale, G., Bolchini, C. & Vatajelu, E.-I. (redacties). Institute of Electrical and Electronics Engineers, blz. 1680-1685 6 blz. 9116552

### **Parallel Implementation of Iterative Learning Controllers on Multi-core Platforms**

Haghi, M., Yao, Y., Goswami, D. & Goossens, K., 15 jun. 2020, *2020 Design, Automation & Test in Europe Conference & Exhibition (DATE)*. Di Natale, G., Bolchini, C. & Vatajelu, E.-I. (redacties). Institute of Electrical and Electronics Engineers, blz. 1704-1709 6 blz. 9116241

### **A scenario- and platform-aware design flow for image-based control systems**

Mohamed, S. (Corresponding author), Goswami, D., Nathan, V., Rajappa, R. & Basten, T., jun. 2020, In: Microprocessors and Microsystems. 75, 16 blz., 103037.

### **Performance Analysis of Embedded Platoon Controllers**

Ibrahim, A., Soroa, I. M., Li, H., Goswami, D. & Basten, T., mei 2020, *2020 IEEE 91st Vehicular Technology Conference, VTC Spring 2020 - Proceedings*. Institute of Electrical and Electronics Engineers, 7 blz. 9128845

### **Designing image-based control systems considering workload variations**

Mohamed, S., Awan, A. U., Goswami, D. & Basten, A. A., 12 mrt. 2020, *58th IEEE Conference on Decision and Control (CDC 2019)*. Piscataway: Institute of Electrical and Electronics Engineers, blz. 3997-4004 8 blz. 9030035

### **A Performance Analysis Framework for Real-Time Systems Sharing Multiple Resources**

Nikkhah, S. T., Geilen, M., Goswami, D. & Goossens, K., mrt. 2020, *Proceedings of the 2020 Design, Automation and Test in Europe Conference and Exhibition, DATE 2020*. Di Natale, G., Bolchini, C. & Vatajelu, E.-I. (redacties). Institute of Electrical and Electronics Engineers, blz. 326-329 4 blz. 9116514

### **Approximation-Aware Design of an Image-Based Control System**

De, S. (Corresponding author), Mohamed, S., Goswami, D. & Corporaal, H., 2020, In: IEEE Access. 8, blz. 174568-174586 19 blz., 9189775.

### **Scenarios in the design of flexible manufacturing systems**

Basten, T., Bastos, J., Medina, R., van der Sanden, B., Geilen, M. C. W., Goswami, D., Reniers, M. A., Stuijk, S. & Voeten, J. P. M., 16 okt. 2019, *System-Scenario-based Design Principles and Applications*. Catthoor, F., Basten, T., Zompakis, N., Geilen, M. & Kjeldsberg, P. G. (redacties). Cham: Springer, blz. 181-224 44 blz.

### **Control of platooned vehicles in presence of traffic shock waves**

Ibrahim, A., Čičić, M., Goswami, D., Basten, A. A. & Johansson, K. H., okt. 2019, *2019 IEEE Intelligent Transportation Systems Conference, ITSC 2019*. Piscataway: Institute of Electrical and Electronics Engineers, blz. 1727-1734 8 blz. 8917389

### **Designing a controller with image-based pipelined sensing and additive uncertainties**

Medina, R., Valencia, J., Stuijk, S., Goswami, D. & Basten, T., okt. 2019, In: ACM Transactions on Cyber-Physical Systems. 3, 3, 26 blz., 33.

### **Model-based processor-in-the-loop framework for composable multi-core platforms**

Haghi, M., Koedam, M., Goswami, D. & Goossens, K., aug. 2019, *Proceedings - Euromicro Conference on Digital System Design, DSD 2019*. Konofaos, N. & Kitsos, P. (redacties). Piscataway: Institute of Electrical and Electronics Engineers, blz. 592-596 5 blz. 8875214

### **Delay-based design of feedforward tracking control for predictable embedded platforms**

Haghi, M., Wenguang, F., Goswami, D. & Goossens, K., 1 jul. 2019, *2019 American Control Conference, ACC 2019*. Piscataway: Institute of Electrical and Electronics Engineers, blz. 3726-3733 8 blz. 8814430

### **IMACS: a framework for performance evaluation of image approximation in a closed-loop system**

Mohamed, S., De, S., Bimpisidis, K., Nathan, V., Goswami, D., Corporaal, H. & Basten, T., jun. 2019, *2019 8th Mediterranean Conference on Embedded Computing, MECO 2019 - Proceedings*. Stojanovic, R., Jozwiak, L., Lutovac, B. & Jurisic, D. (redacties). Piscataway: Institute of Electrical and Electronics Engineers, 4 blz. 8760055

### **Exploiting system dynamics for resource-efficient automotive CPS design**

Maldonado, L., Chang, W., Roy, D., Annaswamy, A., Goswami, D. & Chakraborty, S., 14 mei 2019, *Proceedings of the 2019 Design, Automation and Test in Europe Conference and Exhibition, DATE 2019*. Piscataway: Institute of Electrical and Electronics Engineers, blz. 234-239 6 blz. 8715176

### **Implementation-aware design of image-based control with on-line measurable variable-delay**

Medina, R., Stuijk, S., Goswami, D. & Basten, T., 14 mei 2019, *Proceedings of the 2019 Design, Automation and Test in Europe Conference and Exhibition, DATE 2019*. Piscataway: Institute of Electrical and Electronics Engineers, blz. 240-245 6 blz. 8714840

### **Comparing platform-aware control design flows for composable and predictable TDM-based execution platforms**

Valencia, J., Goswami, D. & Goossens, K., 1 mei 2019, In: ACM Transactions on Design Automation of Electronic Systems. 24, 3, 26 blz., 32.

### **The FitOptiVis ECSEL project: highly efficient distributed embedded image/video processing in cyber-physical systems**

Al-Ars, Z., Basten, T., de Beer, A., Geilen, M., Goswami, D., Jaäskeläinen, P., Kadlec, J., de Alejandro, M. M., Palumbo, F., Peeren, G., Pomante, L., van der Linden, F., Saarinen, J., Säntti, T., Sau, C. & Zedda, M. K., 30 apr. 2019, *ACM International Conference on Computing Frontiers 2019, CF 2019 - Proceedings*. New York: Association for Computing Machinery, Inc, blz. 333-338 6 blz.

### **Evaluation platform of platoon control algorithms in complex communication scenarios**

Zhu, S., Goswami, D. & Li, H., apr. 2019, *2019 IEEE 89th Vehicular Technology Conference, VTC Spring 2019 - Proceedings*. Piscataway: IEEE Press, 5 blz. 8746477

**Bridging the controller design-implementation gap for image-based control systems**

Mohamed, S., Goswami, D. & Basten, T., 19 mrt. 2019.

**Feasibility study and benchmarking of embedded MPC for vehicle platoons**

Soroa, I. M., Ibrahim, A., Goswami, D. & Li, H., 1 mrt. 2019, *Workshop on Autonomous Systems Design (ASD 2019)*. Saidi, S., Ernst, R. & Ziegenbein, D. (redacties). Wadern: Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 15 blz. 2. (OpenAccess Series in Informatics; vol. 68).

**CReTS – Co-simulation Framework for Control, Communication and Traffic for Vehicle Platoons**

Ibrahim, A. M. E., Belagal Math, C., Goswami, D., Basten, T. & Li, H., mrt. 2019. 2 blz.

**Modeling and analysis of FPGA accelerators for real-time streaming video processing in the healthcare domain**

van der Vlugt, S. (Corresponding author), Alizadeh Ara, H., de Jong, R., Hendriks, M., Guerra Marin, R., Geilen, M. & Goswami, D., 1 jan. 2019, In: *Journal of Signal Processing Systems*. 91, 1, blz. 75-91 17 blz.

**CReTS-Co-simulation Framework for Control, Communication and Traffic for Vehicle Platoons**

Ibrahim, A., Belagal Math, C., Goswami, D., Basten, A. A. & Li, H., 2019. 1 blz.

**DASA: an open-source design, analysis and simulation framework for automotive image-based control systems**

Mohamed, S., Zhu, D., Goswami, D. & Basten, T., 2019.

**Compositional dataflow modelling for cyclo-static applications**

Alizadeh Ara, H., Geilen, M., Behrouzian, A., Basten, T. & Goswami, D., 12 okt. 2018, *Proceedings - 21st Euromicro Conference on Digital System Design, DSD 2018*. Konofaos, N., Novotny, M. & Skavhaug, A. (redacties). Piscataway: Institute of Electrical and Electronics Engineers, blz. 121-129 9 blz. 8491805

**Co-simulation framework for control, communication and traffic for vehicle platoons**

Ibrahim, A., Math, C. B., Goswami, D., Basten, T. & Li, H., 12 okt. 2018, *Proceedings - 21st Euromicro Conference on Digital System Design, DSD 2018*. Konofaos, N., Novotny, M. & Skavhaug, A. (redacties). Piscataway: Institute of Electrical and Electronics Engineers, blz. 352-356 5 blz. 8491839

**Optimising quality-of-control for data-intensive multiprocessor image-based control systems considering workload variations**

Mohamed, S., Zhu, D., Goswami, D. & Basten, T., 12 okt. 2018, *Proceedings - 21st Euromicro Conference on Digital System Design, DSD 2018*. Konofaos, N., Novotny, M. & Skavhaug, A. (redacties). Piscataway: Institute of Electrical and Electronics Engineers, blz. 320-327 8 blz. 8491834

**Robust co-synthesis of embedded control systems with occasional deadline misses**

Behrouzian, A., Goswami, D. & Basten, T., 26 sep. 2018, *2018 IEEE 24th International Symposium on On-Line Testing and Robust System Design, IOLTS 2018*. Maniatakos, M., Alexandrescu, D., Gizopoulos, D. & Papavramidou, P. (redacties). Institute of Electrical and Electronics Engineers, blz. 127-130 4 blz. 8474138

**Firmness analysis of real-time applications under static-priority preemptive scheduling**

Baghbanbehrouzian, A., Goswami, D., Basten, T., Geilen, M., Seyedalizadeh Ara, S. & Hendriks, M., 8 aug. 2018, blz. 295-304. 10 blz.

**OS-aware automotive controller design using non-uniform sampling**

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**Scalable analysis for multi-scale dataflow models**

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### **Design and validation of fault-tolerant embedded controllers**

Ghosh, S. K., Dey, S., Goswami, D., Mueller-Gritschneider, D. & Chakraborty, S., 19 apr. 2018, *Proceedings of the 2018 Design, Automation and Test in Europe Conference and Exhibition, DATE 2018*. Institute of Electrical and Electronics Engineers, Vol. 2018-January. blz. 1283-1288 6 blz.

### **NoC-based multiprocessor architecture for mixed-time-criticality applications**

Goossens, K. G. W., Koedam, M. L. P. J., Nelson, A. T., Sinha, S. S., Goossens, S., Li, Y., Breaban, G. D., van Kampenhout, J. R., Tavakoli Najafabadi, R., Valencia, J., Ahmadi Balef, H., Akesson, B., Stuijk, S., Geilen, M. C. W., Goswami, D. & Nabi Najafabadi, M., 1 nov. 2017, *Handbook of hardware/software codesign*. Ha, S. & Teich, J. (redacties). Dordrecht: Springer, blz. 491-530 40 blz.

### **Hybrid automotive in-vehicle networks**

Roy, D., Balszun, M., Goswami, D. & Chakraborty, S., 19 okt. 2017, *NOCS '17 Proceedings of the Eleventh IEEE/ACM International Symposium on Networks-on-Chip*. New York: Association for Computing Machinery, Inc, 8 blz. 12

### **Exploring the trade-off between processing resources and settling time in image-based control through LQR tuning**

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### **Memory-aware embedded control systems design**

Chang, W., Goswami, D., Chakraborty, S., Ju, L., Xue, C. J. & Andalam, S., apr. 2017, In: *IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems*. 36, 4, blz. 586-599 14 blz.

### **Checking metric temporal logic with TRACE**

Hendriks, M., Geilen, M. C. W., Behrouzian, A. R. B., Basten, A. A., Alizadeh, H. & Goswami, D., 3 feb. 2017, *Proceedings - 2016 16th International Conference on Application of Concurrency to System Design, ACSD 2016, 19-21 June 2016, Turan, Poland*. Piscataway: Institute of Electrical and Electronics Engineers, blz. 19-24 6 blz. 7842497

### **Analysis and visualization of execution traces of dataflow applications**

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### **Performance analysis and controller improvement for linear systems with (m,k)-firm data losses**

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### **Design and analysis of control strategies for vehicle platooning**

Saxena, A., Li, H., Goswami, D. & Math, C. B., 1 nov. 2016, *2016 IEEE 19th International Conference on Intelligent Transportation Systems (ITSC), November 1-4, 2016, Rio de Janeiro, Brazil*. Piscataway: Institute of Electrical and Electronics Engineers, blz. 1805-1812 8 blz.

### **Beyond traditional sampling strategies for enhanced performance and cost-effectiveness**

van Zundert, J., Oomen, T. A. E., Goswami, D. & Heemels, M., okt. 2016, *3rd Conference on Precision Mechatronics, DSPE2016, 4-5 October 2016, Sint Michielsgestel, The Netherlands*. Sint Michielsgestel, The Netherlands, blz. 127-128 2 blz.

### **xCPS: a tool to explore cyber physical systems**

Adyanthaya, S., Ara, H. A., Bastos, J., Behrouzian, A., Medina Sánchez, R., van Pinxten, J., van der Sanden, B., Waqas, U., Basten, T., Corporaal, H., Frijns, R., Geilen, M., Goswami, D., Hendriks, M., Stuijk, S., Reniers, M. A. & Voeten, J., okt. 2016, In: *ACM SIGBED Review*. 14, 1, blz. 81-95 15 blz.

### **On the potential of lifted domain feedforward controllers with a periodic sampling sequence**

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#### **Multi-objective co-optimization of FlexRay-based distributed control systems**

Roy, D., Zhang, L., Chang, W., Goswami, D. & Chakraborty, S., 27 apr. 2016, *2016 IEEE Real-Time and Embedded Technology and Applications Symposium, RTAS 2016 - Proceedings*. Piscataway: Institute of Electrical and Electronics Engineers, 12 blz. 7461344

#### **Resource utilization and Quality-of-Control trade-off for a composable platform**

Valencia Payan, J., van Horssen, E. P., Goswami, D., Heemels, W. P. M. H. & Goossens, K. G. W., 25 apr. 2016, *Proceedings of the 2016 Design, Automation and Test in Europe Conference and Exhibition, DATE 2016*. Institute of Electrical and Electronics Engineers, blz. 654-659 6 blz. 7459391

#### **Automotive cyber-physical systems: a tutorial introduction**

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#### **Reconfigurable pipelined sensing for image-based control**

Medina, R., Stuijk, S., Goswami, D. & Basten, T., 2016, *2016 11th IEEE International Symposium on Industrial Embedded Systems (SIES), Krakow, Poland, 23-25 May 2016 : Proceedings*. Piscataway: Institute of Electrical and Electronics Engineers, 8 blz.

#### **Sample-drop firmness analysis of TDMA-scheduled control applications**

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#### **Tight temporal bounds for dataflow applications mapped onto shared resources**

Alizadeh Ara, H., Geilen, M. C. W., Basten, T., Baghbanbehrouzian, A., Hendriks, M. & Goswami, D., 2016, *2016 11th IEEE International Symposium on Industrial Embedded Systems (SIES), Krakow, Poland, 23-25 May 2016 : Proceedings*. Piscataway: Institute of Electrical and Electronics Engineers, 8 blz.

#### **Reliable CPS design for mitigating semiconductor and battery aging in electric vehicles**

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#### **Composable platform-aware embedded control systems on a multi-core architecture**

Valencia Payan, J. D., Goswami, D. & Goossens, K. G. W., 2015, *18th Euromicro Conference on Digital System Design, Funchal, Madeira, Portugal in August 26-28, 2015*. Los Alamitos: IEEE Computer Society, blz. 502-509

#### **Multi-constraint multi-processor resource allocation**

Baghbanbehrouzian, A., Goswami, D., Basten, A. A., Geilen, M. C. W. & Alizadeh Ara, H., 2015, *Proceedings of the XVth International Conference Embedded Computer Systems : Architecture, Modeling and Simulation (SAMOS 2015), Samos, Greece, July 20-23, 2015*. Institute of Electrical and Electronics Engineers

#### **Time series characterization of gaming workload for runtime power management**

Dietrich, B., Goswami, D., Chakraborty, S., Guha, A. & Gries, M., 2015, In: *IEEE Transactions on Computers*. 64, 1, blz. 260-273 13 blz.

#### **xCPS : a tool to eXplore cyber physical systems**

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## Projecten

**AquaConnect, key technologies for safeguarding regional water provision in fresh water stressed deltas**  
de Mol-Regels, M. (Project communicatie medewerker), van der Hagen, D. (Project communicatie medewerker),  
Goswami, D. (Project Manager) & Haghi, M. (Projectmedewerker)  
1/09/21 → 31/08/25

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1/10/19 → 31/01/23

#### **From the cloud to the edge - smart IntegraTion and OPTimization Technologies for highly efficient Image and Video processing Systems**

Geilen, M. C. W. (Projectmedewerker), Basten, A. A. (Projectmedewerker), Goossens, K. G. W. (Projectmedewerker), Goswami, D. (Projectmedewerker), Sánchez Martín, V. (Project Manager), Tabatabaei Nikkha, S. (Projectmedewerker), Azarmi, R. (Projectmedewerker), Elahi, H. (Projectmedewerker), van den Berg, F. (Projectmedewerker), Hendriks, M. (Projectmedewerker), van der Hagen, D. (Project communicatie medewerker), Mohamed, S. (Projectmedewerker), de Mol-Regels, M. (Project communicatie medewerker) & Beigmohammadi, S. (Projectmedewerker)  
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1/09/21 → 31/08/24

#### **Model-Driven Design of Cyber-Physical Systems**

Basten, A. A. (Project Manager), Koedam, M. L. P. J. (Projectmedewerker), Goswami, D. (Projectmedewerker), De, S. (Projectmedewerker), Sánchez Martín, V. (Project Manager), Ibrahim, A. M. E. (Projectmedewerker), Mohamed, S. (Projectmedewerker), Corporaal, H. (Projectmedewerker), Huisken, J. A. (Projectmedewerker), van der Hagen, D. (Project communicatie medewerker) & de Mol-Regels, M. (Project communicatie medewerker)  
1/11/15 → 31/10/19