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Ansættelse

Postdoc

Institut for Mekanik og Elektronik
Syddansk Universitet
1. sep. 2020 → present

Publikationer

Model-free neural network-based predictive control for robust operation of power converters

Sabzevari, S., Heydari, R., Mohiti, M., Savaghebi, M. & Rodriguez, J., 20. apr. 2021, I: *Energies*. 14, 8, 12 s., 2325.

Model-Free Predictive Current Control of a Voltage Source Inverter based on Identification Algorithm

Heydari, R., Young, H. A., Rafiee, Z., Flores-Bahamonde, F., Savaghebi, M. & Rodríguez, J., 18. nov. 2020, *Proceedings - IECON 2020: 46th Annual Conference of the IEEE Industrial Electronics Society*. IEEE, s. 3065-3070 (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Adaptive Model Predictive Control of DFIG-based Wind Farm: A Model-Free Control Approach

Rafiee, Z., Heydari, R., Rafiee, M., Aghamohammadi, M. R., Rodriguez, J. & Blaabjerg, F., 9. nov. 2020, *2020 IEEE 21st Workshop on Control and Modeling for Power Electronics, COMPEL 2020*. IEEE, 9265865

Hybrid Four-wire Three-Level Inverter Equipped with Model Predictive Control for UPS Applications

Shahparasti, M., Heydari, R., Savaghebi, M., Rodriguez, J. & Blaabjerg, F., 9. nov. 2020, *2020 IEEE 21st Workshop on Control and Modeling for Power Electronics, COMPEL 2020*. IEEE, 9265794

Robust High-Rate Secondary Control of Microgrids with Mitigation of Communication Impairments

Heydari, R., Khayat, Y., Amiri, A., Dragicevic, T., Shafiee, Q., Popovski, P. & Blaabjerg, F., nov. 2020, I: *IEEE Transactions on Power Electronics*. 35, 11, s. 12486-12496

A Linear Adaptive Robust Optimization Model for Day-Ahead Scheduling of Microgrid

Zadeh, M. M., Afshar, Z., Heydari, R., Bathaee, S. M. T. & Savaghebi, M., 18. okt. 2020, *IECON 2020 : The 46th Annual Conference of the IEEE Industrial Electronics Society*. IEEE, s. 1501-1506 (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

An Adaptive Droop Control Method for Interlink Converter in Hybrid AC/DC Microgrids

Golsorkhi, M. S., Heydari, R. & Savaghebi, M., sep. 2020, *22nd European Conference on Power Electronics and Applications, EPE 2020 ECCE Europe*. IEEE, 10 s. 9215912

Communication-Free Secondary Frequency and Voltage Control of VSC-Based Microgrids: A High-Bandwidth Approach

Heydari, R., Golsorkhi, M. S., Savaghebi, M., Dragicevic, T. & Blaabjerg, F., sep. 2020, *22nd European Conference on Power Electronics and Applications, EPE 2020 ECCE Europe*. IEEE, 9 s. 9215874

On the secondary control architectures of AC microgrids: an overview

Khayat, Y., Shafiee, Q., Heydari, R., Naderi, M., Dragicevic, T., Simpson-Porco, J., Dörfler, F., Fathi, M., Blaabjerg, F., Guerrero, J. M. & Bevrani, H., jun. 2020, I: *IEEE Transactions on Power Electronics*. 35, 6, s. 6482-6500

Decentralized Frequency Control of AC Microgrids: an Estimation-Based Consensus Approach

Khayat, Y., Heydari, R., Naderi, M., Dragicevic, T., Shafiee, Q., Fathi, M., Bevrani, H. & Blaabjerg, F., 13. mar. 2020, (E-pub ahead of print) I: I E E E Journal of Emerging and Selected Topics in Power Electronics.

Fast Frequency Control of Low-Inertia Hybrid Grid Utilizing Extended Virtual Synchronous Machine

Heydari, R., Savaghebi, M. & Blaabjerg, F., feb. 2020, *2020 11th Power Electronics, Drive Systems, and Technologies Conference, PEDSTC 2020*. IEEE, 9088504

Model-Free Predictive Current Control of a Voltage Source Inverter

Rodriguez, J., Heydari, R., Rafiee, Z., Young, H., Flores-Bahamonde, F. & Shahparasti, M., 2020, I: IEEE Access. 8, s. 211104-211114

High-bandwidth Secondary Voltage and Frequency Control of VSC-based AC Microgrid

Heydari, R., Dragicevic, T. & Blaabjerg, F., nov. 2019, I: IEEE Transactions on Power Electronics. 34, 11, s. 11320-11331

Modeling and Stability Analysis of Back-to-Back Converters in Networked Microgrids

Naderi, M., Khayat, Y., Shafiee, Q., Bevrani, H., Heydari, R., Dragicevic, T. & Blaabjerg, F., okt. 2019, *IECON 2019 - 45th Annual Conference of the IEEE Industrial Electronics Society*. Wiley-IEEE press, s. 3925-3930 (Proceedings of the Annual Conference of the IEEE Industrial Electronics Society).

Estimation-based Consensus Approach for Decentralized Frequency Control of AC Microgrids: 2019 21st European Conference on Power Electronics and Applications (EPE '19 ECCE Europe)

Khayat, Y., Heydari, R., Naderi, M., Dragicevic, T., Shafiee, Q., Fathi, M., Bevrani, H. & Blaabjerg, F., sep. 2019, *2019 21st European Conference on Power Electronics and Applications (EPE '19 ECCE Europe)*. Italy: Wiley-IEEE press, 6 s.

Model Validation of Power Electronics-based Networked Micro-grids by Prony Analysis

Naderi, M., Khayat, Y., Heydari, R., Novak, M., Shafiee, Q., Dragicevic, T., Bevrani, H. & Blaabjerg, F., sep. 2019, *2019 21st European Conference on Power Electronics and Applications, EPE 2019 ECCE Europe*. IEEE, 9 s. 8914988

Robust and Fast Voltage-Source-Converter (VSC) Control for Naval Shipboard Microgrids

Heydari, R., Gheisarnejad, M., Khooban, M. H., Dragicevic, T. & Blåbjerg, F., sep. 2019, I: IEEE Transactions on Power Electronics. 34, 9, s. 8299-8303

A Decentralized Adaptive Control Method for Frequency Regulation and Power Sharing in Autonomous Microgrids

Heydari, R., Khayat, Y., Naderi, M., Anvari-Moghaddam, A., Dragicevic, T. & Blaabjerg, F., aug. 2019, *Proceedings - 2019 IEEE 28th International Symposium on Industrial Electronics, ISIE*. IEEE, s. 2427-2432 (IEEE International Symposium on Industrial Electronics (ISIE)).

High Bandwidth Frequency and Voltage Control in a VSC based AC Microgrid

Heydari, R., 2019, Aalborg Universitet.

Modeling and HiL Real-Time Simulation for the Secondary LFC in Time-Delay Shipboard Microgrids

Khooban, M. H., Vafamand, N., Dragicevic, T., Mardani, M. M. & Heydari, R., nov. 2018, *2018 IEEE International Conference on Electrical Systems for Aircraft, Railway, Ship Propulsion and Road Vehicles & International Transportation Electrification Conference (ESARS-ITEC)*. IEEE, 5 s.

DC Microgrids for Photovoltaic Powered Systems

Heydari, R., Peyghami, S., Yang, Y., Dragicevic, T. & Blaabjerg, F., okt. 2018, *DC Distribution Systems and Microgrids*. Dragicevic, T., Wheeler, P. & Blaabjerg, F. (red.). Institution of Engineering and Technology, Bind 1. s. 389-414

Model Predictive Control Approach for Distributed Hierarchical Control of VSC-Based Microgrids

Heydari, R., Al hasheem, M., Dragicevic, T. & Blaabjerg, F., sep. 2018, *20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe)*. IEEE, 8 s.

Unified Power sharing Control in Hybrid AC/DC Microgrids Employing Synchronous Machine Principle

Heyderi, R., Al hasheem, M., Peyghami, S., Dragicevic, T. & Blaabjerg, F., sep. 2018, *20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe)*. IEEE, 8 s.

Super-high bandwidth secondary control of AC microgrids

Dragicevic, T., Heyderi, R. & Blaabjerg, F., 18. apr. 2018, *2018 IEEE Applied Power Electronics Conference and Exposition (APEC)*. IEEE, 7 s.

Coordinated Operation of VSCs Controlled by MPC and Cascaded Linear Controllers in Power Electronic Based AC Microgrid: 19th IEEE Workshop on Control and Modeling for Power Electronics, COMPEL 2018

Heyderi, R., Dragicevic, T. & Blaabjerg, F., 2018, *2018 IEEE 19th Workshop on Control and Modeling for Power Electronics (COMPEL)*. Wiley-IEEE press, 4 s.

High Bandwidth Distributed Secondary Control with Communication Compensation in VSC-based Microgrid

Heyderi, R., Amiri, A., Dragicevic, T., Popovski, P. & Blaabjerg, F., 2018, *2018 20th European Conference on Power Electronics and Applications (EPE'18 ECCE Europe)*. Latvia: IEEE Press, 8 s. 8515522

Aktiviteter

IEEE Industry Applications Societies (IAS) (Ekstern organisation)

Rasool Heydari (Medlem)

2018 → ...

IEEE Transactions on Industrial Electronics (Tidsskrift)

Rasool Heydari (Peer reviewer)

2018 → ...

IEEE Transactions on Power Electronics (Tidsskrift)

Rasool Heydari (Peer reviewer)

2018 → ...

Implementation of Virtual Synchronous Machine (VSM) control of power converters

Rasool Heydari (Underviser)

2017

IEEE Industrial Electronics Society (Ekstern organisation)

Rasool Heydari (Medlem)

2016 → ...

IEEE Power Electronic Society (PELS) (Ekstern organisation)

Rasool Heydari (Medlem)

2016 → ...

Undervisning og vejledning

Model predictive control of power converters

Rasool Heydari

30/01/2019 → ...

Power Electronic Systems

Rasool Heydari & Mehdi Savaghebi

01/02/2020 → ...

Power system analysis

Rasool Heydari
01/02/2017 → ...