Dinesh Krishnamoorthy

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twitter : @dinesh_kallur
Github : https://github.com/dinesh-krishnamoorthy

Academic Appointments

2022 - current **Eindhoven University of Technology** (TU/e).
Assistant Professor
Department of Mechanical Engineering, Control Systems Technology Group

2021 - 2022 **Harvard University**.
Post-doctoral Researcher
Doyle Lab, Harvard John A. Paulson School of Engineering and Applied Sciences

2019 - 2021 **Norwegian University of Science and Technology** (NTNU).
Post-doctoral Researcher

Education

2016 - 2019 **Norwegian University of Science and Technology** (NTNU).
PhD in Chemical Engineering (Date of defense : 07.11.2019)
Doctoral Advisor : Prof. Sigurd Skogestad
▷ *Novel Approaches to Online Process Optimization under Uncertainty*

2011 - 2012 **Imperial College London**.
MSc Control Systems (Distinction)
Advisor : Prof. Eric C. Kerrigan

2008 - 2011 **University of Nottingham**.
B.Engg (Hons.) Mechatronics Engineering - First class *(Top rank)*

Awards and Honours

2020 **Chorafas Outstanding PhD Thesis Award**
Dimitris N. Chorafas Foundation
▷ *Awarded for the best PhD thesis between 2019-2020 (one of 35 worldwide)*

2020 **PhD Excellence Award on Computer-Aided Process Engineering (CAPE)**
European Federation of Chemical Engineers (EFCE)
▷ *Awarded for the best PhD thesis in the field of process systems engineering between 2017-2019*

2020 **Faculty of Natural Sciences Best PhD Thesis Award**
Norwegian University of Science and Technology (NTNU)

2020 **Post-doc Travel Award**
Processes

2019 **National Science Foundation (NSF) Young Researcher Travel Award**
Foundations on Process Analytics and Machine learning (FOPAM)

2018 **IFAC-ABB Best Student Paper Award**
IFAC Workshop on Automatic Control in Offshore Oil and Gas production

2018 **IFAC Young Author Award Finalist** (top 3) & **Keynote speaker**
IFAC Symposium on Advanced Control of Chemical Processes (ADCHEM)

2011 **Graduating Student Award for Outstanding Academic Excellence**
University of Nottingham, Malaysia Campus

2008, 2009, & 2010 **High Achiever's Scholarship** (Three consecutive years)
University of Nottingham, Malaysia Campus

Fellowships and Grants

2020 - 2021 (co-PI) Peder Sather Grant - Peder Sather Center for Advanced Study at UC Berkeley (US$24000)
Deep Learning-based Embedded Control Systems for Biomedical Applications.

2019 - 2022 (co-PI) IKTPLUSS Research Grant - Research Council of Norway (Total $\sim$ €1.2 million ; To D.K. $\sim$€500000)
Intelligent use of data to build optimization tools for cyber-physical systems

Industrial Research Experience

2020 - 2021 **Novo Nordisk, Device R&D**, Denmark.
Senior Data Scientist - Digital Health Technologies (part-time 20%)

2018 - 2019 **Equinor Research Center**, Norway.
Senior Researcher (part-time 20%)

2012 - 2016 **Equinor Research Center**, Norway.
Senior Researcher, Production Optimization

Secondary Academic Appointments

2022 - current Research Associate
Doyle Lab, Harvard John A. Paulson School of Engineering and Applied Sciences
▷ *Harvard University, Cambridge, MA, USA*

2020 Visiting Research Scholar
Department of Applied Mathematics and Computer Science, DTU
▷ *Denmark Technical University (DTU), Kongens Lyngby, Denmark*

2019 Visiting PhD Student
Biegler Lab, Department of Chemical Engineering
▷ *Carnegie Mellon University, Pittsburgh, PA, USA*

Research Interests

— Distributed control and optimization of large-scale *cyber-physical systems*
— Data-driven control and decision-making
— Interface between learning, optimization and control

Journal papers

J1 **Krishnamoorthy, D.**, 2021. A Sensitivity-based Data Augmentation for Learning an Approximate Model Predictive Controller, *IEEE Transactions on Automatic Control*, DOI :10.1109/TAC.2021.3124983.

J2 Dirza, R., Matias, J., Skogestad, S., and **Krishnamoorthy, D**. 2022. Experimental validation of distributed feedback-based RTO, *Control Engineering Practice* (In-Press)

J3 **Krishnamoorthy, D.** and Doyle III, F. J., 2022. Safe Bayesian Optimization using Interior-Point Methods - Applied to Personalized Insulin Dose Guidance. *IEEE Control System Letters*, Vol. 6, p. 2834 - 2839.

J4 **Krishnamoorthy, D.** and Skogestad, S., 2022. Real-Time Optimization as a Feedback Control Problem - A Review. *Comput. & Chem. Eng.* Vol. 161, pp. 107723. *Invited paper in connection to the Excellence in CAPE PhD thesis award*

J5 **Krishnamoorthy, D.**, Dimitri Boiroux, Tinna Björk Aradottir, Sarah Ellinor Engell and John Bagterp Jørgensen, 2021. A Model-free Approach to Automatic Dose Guidance in Long Acting Insulin Treatment of Type 2 Diabetes. *IEEE Control System Letters*, Vol.5(6), p.2030 - 2035.

J6 **Krishnamoorthy, D.**, 2021. A Distributed Feedback-based Online Process Optimization Framework for Optimal Resource Sharing. *J. Proc. Control*. Vol. 97, p. 72-83.

J7 **Krishnamoorthy, D.**, Biegler, L. and Jäschke, J., 2020. Adaptive Horizon Economic Nonlinear Model Predictive Control. *J. Proc. Control*. Vol. 92, p. 108-118.

J8 **Krishnamoorthy, D.**, Skogestad, S., 2020 Systematic design of active constraint switching using selectors. *Comput. & Chem. Eng.*. Vol. 143, p. 107106.

J9 **Krishnamoorthy, D.**, Foss, B. and Skogestad, S., 2019. A Primal decomposition algorithm for distributed multistage scenario model predictive control. *J. Proc. Control*. Vol 81, p.162-171 - *ADCHEM special issue invited paper*.

J10 **Krishnamoorthy, D.**, Fjalestad, K. and Skogestad, S., 2019. Optimal operation of offshore oil and gas production using simple control structures, *Control Engineering Practice*, Vol 91, 104107.

J11 **Krishnamoorthy, D.**, Foss, B. Suwartadi, E., Jäschke, J. and Skogestad, S., 2018. Improving Scenario Decomposition for Multistage MPC using a Sensitivity-based Path-following Algorithm, *IEEE Control System Letters*, Vol 2(4), p.581-586

J12 **Krishnamoorthy, D.**, and Skogestad, S., 2019. Online process optimization with changes in active constraint sets using simple feedback control structures, *Ind. Eng. Chem. Res*. Vol. 58 (30), p. 13555-13567

J13 Jahanshahi, E., **Krishnamoorthy, D.**, Codas, A., Foss, B. and Skogestad, S., 2019. Plantwide control of an oil production network, *Comput. & Chem. Eng.*, Vol. 136, p. 106765.

J14 **Krishnamoorthy, D.**, Jahanshahi, E. and Skogestad, S., 2019. A feedback RTO strategy using Transient Measurements , *Ind. Eng. Chem. Res*. Vol 58 (1), p. 207-216.

J15 Straus, J.[†], **Krishnamoorthy, D.**[†] and Skogestad, S., 2019. Combining self-optimizing control and extremum seeking control - Applied to ammonia reactor case study, *J. Proc. Control*. Vol 78, p. 78-87. ([†]*equal contribution*)

J16 **Krishnamoorthy, D.**, Foss, B. and Skogestad, S., 2018. Steady-State Real-time Optimization using Transient Measurements. *Comput. & Chem. Eng.*, Vol 115, p.34-45

J17 **Krishnamoorthy, D.**, Foss, B. and Skogestad, S., 2016. Real-Time Optimization under Uncertainty Applied to a Gas Lifted Well Network. *Processes*, Vol 4(4), p.52

Peer-reviewed conference papers

C1 **Krishnamoorthy, D.** and Kungurtsev, V., 2022. A Sensitivity-assisted Alternating Directions Method of Multipliers for Distributed Optimization, *Proceedings of the 2022 IEEE Conference on Decision and Control*, Cancun, Mexico.

C2 **Krishnamoorthy, D.** and Doyle III, F. J., 2022. Safe Bayesian Optimization using Interior-Point Methods - Applied to Personalized Insulin Dose Guidance. *Proceedings of the 2022 IEEE Conference on Decision and Control*, Cancun, Mexico.

C3 **Krishnamoorthy, D.** and Doyle III, F. J., 2022. Personalized Dose Guidance using Safe Bayesian Optimization. *2022 Machine Learning for Health (ML4H)*, New Orleans, USA.

C4 Dirza, R., Rizwan, M., Skogestad, S. and **Krishnamoorthy, D.**, 2022. Real-Time Optimal Resource Allocation Using Online Primal Decomposition, IFAC-PapersOnLine Vol. 55 (21), p.31-36.

C5 Bernardino, L.F., **Krishnamoorthy, D.** and Skogestad, S., 2022. Optimal Operation of Heat Exchanger Networks with Changing Active Constraint Regions, Computer Aided Chemical Engineering Vol. 49, p.421-426.

C6 Dirza, R., **Krishnamoorthy, D.** and Skogestad, S., 2022. Primal-dual Feedback-optimizing Control with Direct Constraint Control, Computer Aided Chemical Engineering Vol. 49, 1153-1158.

C7 Bernardino, L.F., **Krishnamoorthy, D.** and Skogestad, S., 2022. Comparison of Simple Feedback Control Structures for Constrained Optimal Operation. IFAC-PapersOnLine Vol. 55 (7), p.883-888

C8 **Krishnamoorthy, D.**, Dimitri Boiroux, Tinna Björk Aradottir, Sarah Ellinor Engell and John Bagterp Jørgensen, 2021. A Model-free Approach to Automatic Dose Guidance in Long Acting Insulin Treatment of Type 2 Diabetes. *Proceedings of the 2021 American Control Conference*, New Orleans, USA.

C9 **Krishnamoorthy, D.**, Mesbah, A., Paulson, J., 2021. An Adaptive Correction Scheme for Offset-Free Asymptotic Performance in Deep Learning-based Economic MPC, *IFAC-PapersOnLine* Vol. 54 (3), p. 584-589 (IFAC ADCHEM 2021).

C10 Dirza, R., Skogestad,S., **Krishnamoorthy, D.**, 2021. Optimal Resource Allocation using Distributed Feedback Real-time Optimization. *IFAC-PapersOnLine*, Vol. 54 (3), p.706-711 (IFAC ADCHEM 2021) *Keynote paper presented by D.K.*

C11 Mdoe, Z., **Krishnamoorthy, D.**, and Jäschke,J., 2021. Adaptive Horizon Multistage Nonlinear Model Predictive Control. *Proceedings of the 2021 American Control Conference*, p. 2088-2093.

C12 Prakash, S., **Krishnamoorthy, D.**, and Jäschke,J., Multi-scenario Design Optimization using ADMM of a Thermal Energy Storage system. *Computer aided chemical engineering* (ESCAPE 31), Vol. 50, p. 739-745.

C13 **Krishnamoorthy, D**.,Valli, C. and Skogestad, S., 2020. Real-time Optimal Resource Allocation in an Industrial Symbiotic Network using Transient Measurements. *Proceedings of the 2020 American Control Conference*, p. 3541-3546, Denver, USA.

C14 **Krishnamoorthy, D.** and Skogestad, S., 2020. Linear Combination of Gradients as Optimal Controlled Variables, *Computer aided chemical engineering*, Vol. 48, p. 1237-1242 (ESCAPE 30).

C15 **Krishnamoorthy, D.**, Jäschke, J. and Skogestad, S., 2019. Multistage Model Predictive Control with Online Scenario Tree Update using Recursive Bayesian Weighting, *Proceedings of the 2019 European Control Conference*, p.1443 - 1448, Naples, Italy.

C16 **Krishnamoorthy, D.**, Ryu, J. and Skogestad, S., 2019. Dynamic extremum seeking control applied to a gas lifted well network, *IFAC-PapersOnLine*, 52(1), 802-807 (IFAC DYCOPS 2019)

C17 Thombre, M., **Krishnamoorthy, D.**, and Jäschke, J., 2019. Data-driven Multistage Model Predictive Control of a Thermal Storage System with Time-Varying Uncertainty, *IFAC-PapersOnLine*, 52(1), 461-467 (IFAC DYCOPS 2019)

C18 Delou, P., Azevedo, J., **Krishnamoorthy, D.**, de Souza Jr, M. and Secchi, A., 2019. Model Predictive Control with Reconfiguration Strategy applied to an Electric Submersible Pump in a subsea environment, *IFAC-PapersOnLine*, 52(1), 784-789 (IFAC DYCOPS-CAB, Florianopolis, Brazil)

C19 **Krishnamoorthy, D.**, Jahanshahi, E. and Skogestad, S., 2019. A feedback Real time optimization strategy applied to an evaporator process, PSE Asia, Bangkok, Thailand (*In-Press*)

C20 **Krishnamoorthy, D.**, Foss, B. Suwartadi, E., Jäschke, J. and Skogestad, S., 2018. Improving Scenario Decomposition for Multistage MPC using a Sensitivity-based Path-following Algorithm, *Proceedings of the 2018 IEEE Conference on Decision and Control*, Miami beach, USA.

C21 **Krishnamoorthy, D.**, Foss, B. and Skogestad, S., 2018. A distributed algorithm for scenario-based model predictive control using primal decomposition *IFAC-PapersOnLine* Vol. 51 (18), pp. 351-356 (IFAC ADCHEM, Shenyang, China) - *Keynote paper presented by D.K., and IFAC Young Author Award finalist*

C22 **Krishnamoorthy, D.**, Thombre, M., Jäschke, J. and Skogestad, S., 2018. Data-driven scenario selection for multistage robust model predictive control, *IFAC-PapersOnLine*, 51(20), pp.462-468 (IFAC NMPC, Madison, Wisconsin).

C23 **Krishnamoorthy, D.**, Jahanshahi, E. and Skogestad, S., 2018. Gas-lift Optimization by Controlling Marginal Gas-Oil Ratio using Transient Measurements, *IFAC-PapersOnLine*, 51(8), pp.19-24 (IFAC OOGP, Esbjerg, Denmark) - *IFAC-ABB Best Student Paper Award*.

C24 Suwartadi, E.,**Krishnamoorthy, D.**and Jäschke, J., 2018. Fast Economic Model Predictive Control for a Gas Lifted Well Network, *IFAC-PapersOnLine*, 51(8), pp.25-30 (IFAC OOGP, Esbjerg, Denmark).

C25 Backi, C. J.,**Krishnamoorthy, D.**and Skogestad, S., 2018. Slug handling with a virtual harp - based on nonlinear predictive control for a gravity separator, *IFAC-PapersOnLine*, 51(8), pp.120-125 (IFAC OOGP, Esbjerg, Denmark).

C26 **Krishnamoorthy, D.**, Aguiar, M. A. M., Foss, B. and Skogestad, S., 2018. A Distributed Optimization Strategy for Large scale Oil and Gas Production Systems, *Proceesdings of the 2018 IEEE Conference on Control Technology and Applications* (CCTA), Copenhagen, Denmark.

C27 Backi, C. J., **Krishnamoorthy, D.**, Verheyleweghen, A. and Skogestad, S., 2018.Combined nonlinear moving horizon estimation and model predictive control applied to a compressor for active surge control, *Proceedings of the 2018 IEEE Conference on Control Technology and Applications* (CCTA), Copenhagen, Denmark.

C28 Bonnowitz, H., Straus, J., **Krishnamoorthy, D.**, and Skogestad, S., 2018. Control of the Steady-State Gradient of an Ammonia Reactor using Transient Measurements, *Computer aided chemical engineering*, Vol.43, p.1111-1116 (ESCAPE 28, Graz)

C29 Reyes-Lúa, A., Zotica, C., Das, T., **Krishnamoorthy, D.**, and Skogestad, S., 2018. Changing between Active Constraint Regions for Optimal Operation : Classical Advanced Control versus Model Predictive Control, *Computer aided chemical engineering*, Vol.43, p.1015-1020 (ESCAPE 28, Graz) - *Keynote paper presented by S. S.*.

C30 **Krishnamoorthy, D.**, Foss, B. and Skogestad, S., 2017. Gaslift optimization under uncertainty. *Computer Aided Chemical Engineering*, vol.40, pg 1753-1758 (ESCAPE 27, Barcelona).

C31 **Krishnamoorthy, D.**, Pavlov, A. and Li, Q., 2016. Robust Extremum Seeking Control with application to Gas Lifted Oil Wells. *IFAC-PapersOnLine*, 49(13), pp.205-210 (IFAC ALCOSP).

C32 **Krishnamoorthy, D.**, Bergheim, E.M., Pavlov, A., Fredriksen, M. and Fjalestad, K., 2016. Modelling and Robustness Analysis of Model Predictive Control for Electrical Submersible Pump Lifted Heavy Oil Wells. *IFAC-PapersOnLine*, 49(7), pp.544-549 (IFAC DYCOPS, Trondheim, Norway).

C33 Pavlov, A., **Krishnamoorthy, D.**, Fjalestad, K., Aske, E. and Fredriksen, M., 2014, October. Modelling and model predictive control of oil wells with electric submersible pumps. *Proceedings of the 2014 IEEE Conference on Control Applications* p. 586-592.

Selected presentations and invited talks

P1 **Krishnamoorthy, D.**, The role of parametric sensitivities at the interface of control, learning, and optimization, Seminar at Electrical and Systems Enginering at UPenn, 29 April 2022.

P2 **Krishnamoorthy, D.**, Efficient Distributed Real time Optimization Algorithms for Large-scale Process, Process Control, Optimization, and Data Analytics Young Researcher Online Seminar Series, 27 Apr 2022. systems.

P3 **Krishnamoorthy, D.**, Efficient Distributed Real time Optimization Algorithms for Large-scale Process, Seminar at McMaster University, 04 May 2022.

P4 **Krishnamoorthy, D.**, Open Challenges in the Optimization of Industrial Symbiotic Systems, Future Innovations in Process Systems Engineering (FIPSE 5), Crete, Greece, 17 - 19 Jul 2021.

P5 **Krishnamoorthy, D.**, Distributed Real-time Optimization for large-scale plants - Towards sustainable manufacturing, Technical University of Denmark Webinar, 18 Dec 2020. (*Invited talk*)

P6 **Krishnamoorthy, D.**, On the interplay between optimization and machine learning, and the role of sensitivities, Data Analytics and Intelligent Systems Lab, University of British Columbia, 9 Nov 2020. (*Invited talk*)

P7 **Krishnamoorthy, D.** A Brief Overview of online process optimization approaches, Excellence in CAPE PhD Award Lecture, 30th European symposium on Computer Aided Process Engineering (ESCAPE), 31 Aug 2020 (*Award lecture*)

P8 **Krishnamoorthy, D.**, Achieving optimal operation without solving optimization problems, Virtual Seminar on Systems and Control at the Federal University of Rio de Janeiro, 20 Jul 2020 (*Invited talk*)

P9 **Krishnamoorthy, D.** Online process optimization approaches under uncertainty, DTU Compute and DTU Prosys, Kgs. Lyngby, Denmark (23 Jan 2020) (*Invited talk*)

P10 **Krishnamoorthy, D.**, and Skogestad, S., 2019. Real-time optimization strategies using surrogate optimizers, Foundation on Process Analytics and Machine Learning (FOPAM), Raleigh, NC - *NSF Young Researcher Travel Award*

P11 **Krishnamoorthy, D.**, Jäschke, J. and Skogestad, S. Overview and classification of online process optimization approaches, IFAC DYCOPS Pre-symposium workshop, Florianopolis, Brazil (*Main organizer and speaker*)

P12 **Krishnamoorthy, D.**. Production optimization using simple control loops, Subsea Valley Conference, Oslo, 10 - 11 Apr 2019 (*Invited talk*)

P13 Skogestad, S. and **Krishnamoorthy, D.**, An Overview and Evaluation of Approaches for Online Process Optimization, PSE Asia,(*Invited opening plenary talk given by S. Skogestad*), 16 -19 Jan 2019.

P14 **Krishnamoorthy, D.**, Overview of Real-time optimization approaches under uncertainty, Federal university of Rio de Jenerio (UFRJ-COPPE), May 2018. (*Invited talk*)

P15 **Krishnamoorthy, D.**, Efficient production optimization strategies using transient measurements, VII Brazil-Norway Production Optimization workshop, Rio De Jenerio, May 2018. (*Invited talk*)

P16 **Krishnamoorthy, D.**, Foss, B. and Skogestad, S. Production optimization under uncertainty, NFA Subsea conference, Kristiansand, 12-13 Sept 2017. (*Invited talk*)

P17 **Krishnamoorthy, D.** Scenario-based Model Predictive Control, Guest Lecture, Federal University of Santa Catarina, Florianopolis, May 2017. (*Invited talk*)

P18 **Krishnamoorthy, D.**, Foss, B. and Skogestad, S. Real-Time Optimization under Uncertainty Applied to a Gas Lifted Well Network, VI Brazil-Norway Production Optimization workshop, Rio De Jenerio, April 2017. (*Invited talk*)

Patents

I1 **Krishnamoorthy, D.**, and Doyle III, F.J. 2022, System and Methods for Individualized Bolus Calculations. US serial no. 63/338,363.

I2 Aske, E., **Krishnamoorthy, D.**, Fjalestad, K., Pavlov, A. and Fredriksen, M. 2014, Well Control system (WO2015070913A1, CA2930653A1, US20160290077A1, GB2535090B)

I3 **Krishnamoorthy, D.** and Fjalestad, K. 2017, Estimating flow rate at a pump (WO2017061873A1, CA3001234A1, GB2543048A)

Articles Under Review

R1 **Krishnamoorthy, D.**, 2022. A Novel Data Augmentation Framework for Optimal State-Action Pair Datasets.

R2 **Krishnamoorthy, D.**, 2022. Optimizing Surplus Heat Recovery using Fast Fourier Transform-based Extremum Seeking Control

R3 **Krishnamoorthy, D.** and Doyle III, F. J., 2022. Safe and Personalized Meal Bolus Calculator for Type-1 Diabetes using Bayesian Optimization.

Press, Media, and Others

M1 Article on *Universitets Avisa* interviewing me in connection to my PhD Excellence Award. (in Norwegian) `https://tinyurl.com/8epwvxn7`

M2 Report on Age-dependent Epidemiological model of COVID-19 to assist policy makers in Norway - Communicated to the Director-General of the Norwegian Institute of Public Health (NIPH) on 23 March 2020 (National Lockdown announced on 12 March 2020).

M3 Contribution to the biography on Prof. Jens G. Balchen titled, *Alltid Rabiat* by Gard Paulsen (In Norwegian)

Teaching activities

2021 (Autumn) — Lecturer and course coordinator, KP3100 Chemical Engineering
▷ *Department Of Chemical Engineering, NTNU* ▷ *Undergraduate level*

2020 (Autumn) — Lecturer and course coordinator, KP3100 Chemical Engineering
▷ *Department Of Chemical Engineering, NTNU* ▷ *Undergraduate level*

2020 (Autumn) — Lecturer, KP8115 Advanced Process Control
▷ *Department Of Chemical Engineering, NTNU* ▷ *Graduate level*

2019 (Autumn) — Lecturer, KP8115 Advanced Process Control
▷ *Department Of Chemical Engineering, NTNU* ▷ *Graduate level*

2019 (Spring) — Lecturer and course coordinator, Numerical Optimal Control
▷ *Short Intensive graduate level course in Federal University of Rio de Janeiro (UFRJ-COPPE)* ▷ *Graduate level*

2018 (Autumn) — Teaching Assistant, KP8115 Advanced Process Control
▷ *Department Of Chemical Engineering, NTNU* ▷ *Graduate level*

Supervision of doctoral and masters students (Co-supervisor)

2019 - Co-supervisor for 2 PhD students at Department of Chemical Engineering, NTNU.

2017 - Co-supervised 9 Master Thesis students (3 from NTNU, 3 from Federal University of Rio de Janeiro, 1 from TU Berlin and 1 from Politecnico di Milano)

Professional Membership

2018 - Affiliate Member- International Federation of Automatic Control (IFAC)
- ▷ *Technical committee Member TC2.4 Optimal Control*
- ▷ *Technical committee Member TC6.1 Process Control*

2018 - Member- Institute of Electrical and Electronic Engineers (IEEE)
- ▷ *Member - Control Systems Society (IEEE CSS)*
- ▷ *Member of the IEEE CSS TC on Process Control*
- ▷ *Member of the IEEE CSS TC on Networks and Communication systems*
- ▷ *Member of the IEEE CSS TC on Biomedical and Healthcare systems*

2017 - Senior Member - American Institute of Chemical Engineers (AIChE)
- ▷ *Computing and Systems Technology (CAST) Division member*

Professional service

2023 Associate Editor (TC2.4), IFAC World Congress, Yokohama, Japan

2023 Associate Editor, European Control Conference (ECC), Bucharest, Romania

2022 International Program Committee, IEEE Symposium on Advanced Control of Industrial Processes (AdCONIP), Vancouver, Canada

2020 – 2022 Session Co-chair in Areas 10B and 10C, AIChE Annual Meeting

2020 Workshop organizer, IFAC ACODS pre-symposium workshop on online process optimization, Chennai, India

2019, 2020 Undergraduate Student Poster Competition Judge, AIChE Annual Meeting

2019 Workshop organizer, Workshop on Open Challenges in Online Process Optimization at NTNU, Trondheim, Norway

2019 Workshop organizer, IFAC DYCOPS pre-symposium workshop on online process optimization, Florianopolis, Brazil

2018 Program Committee, 7th Brazil-Norway Production Optimization workshop, Rio De Jeneiro, Brazil

2017 Associate Editor, 1st IEEE Conference on Control Technology and Applications (IEEE CCTA), Hawaii, USA

2019 - Reviewer of several Journal articles
- — IEEE Transactions on Automatic Control
- — IEEE Control Systems Letters
- — Automatica
- — Journal of Process Control
- — Control Engineering practice
- — IEEE Access
- — Computers and Chemical Engineering
- — Optimal Control Applications and Methods
- — AIChE Journal
- — Industrial and Engineering Chemistry Research
- — Brazilian Journal of Chemical Engineering

2014 - Reviewer of several IEEE CSS and IFAC conference papers

Referee Details

Provided upon request.