

## Lect. PhD ALPER SAVAŐCI

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: ADR-3958-2022

ScopusID: 57214754719

### Education Information

Doctorate, Florida International University, College of Engineering & Computing, Electrical and Computer Engineering, United States Of America 2018 - 2023

Postgraduate, Michigan Technological University, College of Engineering, Electrical and Computer Engineering, United States Of America 2016 - 2018

Undergraduate, Erciyes University, Mühendislik Fakültesi, Elektrik- Elektronik Mühendisliđi, Turkey 2007 - 2012

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Distribution Grid Optimal Power Flow Incorporating Smart Distribution Grid Optimal Power Flow Incorporating Smart Inverters and Legacy Control Devices, Florida International University, Faculty of Engineering, Electrical and Computer Engineering, 2023

Postgraduate, Grid-aware optimal demand response management of smart homes, Michigan Technological University, College of Engineering, Electrical and Computer Engineering, 2018

### Research Areas

Direct Energy Conversion and Energy Storage, Power System Analysis, Generating Stations and Plants, Electric Power Transmission, Distribution and Protection, Renewable energy

### Academic Titles / Tasks

Lecturer PhD, Abdullah Gul University, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliđi, 2023 - Continues

Research Assistant, Florida International University, College of Engineering, Electrical and Computer Engineering, 2019 - 2022

Research Assistant, Kütahya Dumlupınar University, Teknoloji Fakültesi, Elektrik-Elektronik Muhendisligi, 2013 - 2015

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Optimal Tuning of Local Voltage Control Rule of Load Tap Changers for Dynamic Operation of Unbalanced Distribution Networks**  
Savasci A., Inaolaji A., Paudyal S.  
IEEE Transactions on Industry Applications, vol.60, no.1, pp.1322-1331, 2024 (SCI-Expanded)
- II. **Distributed Optimal Power Flow in Unbalanced Distribution Grids With Non-Ideal Communication**  
Inaolaji A., Savasci A., Paudyal S., Kamalasadana S.  
IEEE Transactions on Industry Applications, vol.59, no.5, pp.5385-5397, 2023 (SCI-Expanded)
- III. **Two-Stage Volt-VAR Optimization of Distribution Grids With Smart Inverters and Legacy Devices**  
Savasci A., Inaolaji A., Paudyal S.  
IEEE Transactions on Industry Applications, vol.58, no.5, pp.5711-5723, 2022 (SCI-Expanded)
- IV. **Distribution Grid Optimal Power Flow in Unbalanced Multiphase Networks With Volt-VAR and Volt-Watt Droop Settings of Smart Inverters**  
Inaolaji A., Savasci A., Paudyal S.  
IEEE Transactions on Industry Applications, vol.58, no.5, pp.5832-5843, 2022 (SCI-Expanded)

## Papers Published in Refereed Scientific Meetings

- I. **Optimal Dead Band Control of Occupant Thermostats for Grid-Interactive Homes**  
Savasci A., Ceylan O., Paudyal S.  
2024 International Conference on Smart Energy Systems and Technologies, SEST 2024, Torino, Italy, 10 - 12 September 2024
- II. **Data-Driven Methods for Optimal Setting of Legacy Control Devices in Distribution Grids**  
Savasci A., Ceylan O., Paudyal S.  
2024 IEEE Power and Energy Society General Meeting, PESGM 2024, Washington, United States Of America, 21 - 25 July 2024
- III. **Enhancing Intrusion Detection in Electric Networks Using Physics-Informed Random Forest**  
Bozdağ M., Savaşçı A.  
2024 Innovations in Intelligent Systems and Applications Conference, ASYU 2024, Ankara, Turkey, 16 - 18 October 2024
- IV. **Optimal Droop Scheduling of Smart Inverters in Unbalanced Distribution Feeders**  
Savaşçı A., Inaolaji A., Paudyal S.  
2023 IEEE Power & Energy Society General Meeting (PESGM), Florida, United States Of America, 16 - 20 July 2023, pp.1-5
- V. **An Efficient Method for Dynamic Hosting Capacity of Distribution Grids**  
Khan M. A. I., Savasci A., Paudyal S.  
4th Annual IEEE Kansas Power and Energy Conference, KPEC 2023, Kansas, United States Of America, 27 - 28 April 2023
- VI. **Optimal Dead Band Control of Load Tap Changers in Distribution Networks**  
SAVAŞCI A., Inaolaji A., Paudyal S.  
2023 IEEE PES Generation, Transmission and Distribution International Conference and Exposition, GTD 2023, İstanbul, Turkey, 22 - 25 May 2023, pp.171-175
- VII. **A Consensus ADMM-Based Distributed Volt-VAR Optimization for Unbalanced Distribution Networks**  
Inaolaji A., Savasci A., Paudyal S., Kamalasadana S.  
2022 IEEE Industry Applications Society Annual Meeting, IAS 2022, Michigan, United States Of America, 9 - 14 October 2022, vol.2022-October
- VIII. **Optimal Coordination of On-Load Tap Changers with Local Control Rules**  
Savasci A., Inaolaji A., Paudyal S.  
2022 IEEE Industry Applications Society Annual Meeting, IAS 2022, Michigan, United States Of America, 9 - 14

October 2022, vol.2022-October

- IX. **Optimal Droop Settings of Smart Inverters**  
Inaolaji A., Savasci A., Paudyal S.  
48th IEEE Photovoltaic Specialists Conference, PVSC 2021, Florida, United States Of America, 20 - 25 June 2021, pp.2584-2589
- X. **Distribution grid optimal power flow integrating volt-var droop of smart inverters**  
Savasci A., Inaolaji A., Paudyal S.  
13th Annual IEEE Green Technologies Conference, GREENTECH 2021, Colorado, United States Of America, 7 - 09 April 2021, vol.2021-April, pp.54-61
- XI. **Accuracy of phase-decoupled and phase-coupled distribution grid power flow models**  
Inaolaji A., Savasci A., Paudyal S., Kamalasadana S.  
2021 IEEE Power and Energy Society Innovative Smart Grid Technologies Conference, ISGT 2021, Washington, United States Of America, 16 - 18 February 2021
- XII. **Efficient Distribution Grid Optimal Power Flow with Discrete Control of Legacy Grid Devices**  
Savasci A., Inaolaji A., Paudyal S., Kamalasadana S.  
2021 IEEE Power and Energy Society General Meeting, PESGM 2021, Washington, United States Of America, 26 - 29 July 2021, vol.2021-July
- XIII. **Distribution Grid Optimal Power Flow with Adaptive Volt-VAR Droop of Smart Inverters**  
Savasci A., Inaolaji A., Paudyal S.  
2021 IEEE Industry Applications Society Annual Meeting, IAS 2021, Vancouver, Canada, 10 - 14 October 2021, vol.2021-October
- XIV. **Distribution Grid Optimal Power Flow with Volt-VAR and Volt-Watt Settings of Smart Inverters**  
Inaolaji A., Savasci A., Paudyal S.  
2021 IEEE Industry Applications Society Annual Meeting, IAS 2021, Vancouver, Canada, 10 - 14 October 2021, vol.2021-January
- XV. **Performance analysis of mixed-integer conic and mixed-integer linear unit commitment models**  
Savasci A., Inaolaji A., Paudyal S.  
2020 IEEE Power and Energy Society General Meeting, PESGM 2020, Montreal, Canada, 2 - 06 August 2020, vol.2020-August
- XVI. **Design of A Simplified Hierarchical Bayesian Network for Residential Energy Storage Degradation**  
Khan K., Hossen T., Savasci A., Gauchia L., Paudyal S.  
2019 IEEE Power and Energy Society General Meeting, PESGM 2019, Georgia, United States Of America, 4 - 08 August 2019, vol.2019-August

## Metrics

Publication: 21

Citation (WoS): 77

Citation (Scopus): 144

H-Index (WoS): 7

H-Index (Scopus): 7