CURRICULUM VITAE

Personal information

Name, Surname:	Oprea Simona-Vasilica		
Date of birth:	14.07.1978	Sex:	Female
Nationality:	Romanian		
Researcher unique identifier(s)	https://scholar.google.com/citations?user=hIKefqAAAAAJ&hl=en		
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	ResearcherID: AAF-1475-2019		
URL for personal website (if	https://simonaoprea.ase.ro/		
case):			

Education

Year	Faculty/department - University/institution - Country
2022	Habilitation in Economic Informatics, Bucharest University of Economic Studies, Romania
2014-	PhD in Economic Informatics at the Bucharest University of Economic Studies, Romania.
2017	PhD thesis title: "Informatics solutions for decision assistance regarding electricity consumption optimization in smart grids"
2002-	PhD in Electrical Engineering at the Bucharest Polytechnic University, Romania. PhD thesis
2009	title: "Aspects regarding the open access to the electricity grids. Renewable energy sources
	integration"
2005-	Master in Infrastructure Management at the Yokohama National University, Japan. The
2007	International Graduate School of Social Sciences. Thesis title: "Allocation methods of cross-
	border grid capacity"
2001-	Master in Power Systems at the Bucharest Polytechnic University, Energy Faculty, Romania.
2002	Thesis on grid congestions and overhead lines capacity allocation between neighboring power
	systems.
1996-	Bachelor at the Bucharest Polytechnic University, Energy Faculty, Romania. Thesis on grid
2001	congestion management.

Positions - current and previous

(Academic sector/research institutes/industrial sector/public sector/other)

Year	Job title – Employer – Country
Feb. 2022-	Associate Professor at the Bucharest University of Economic Studies, Faculty of
present	Cybernetics, Statistics and Economic Informatics, Romania. PhD Supervisor since 2022
2022	Member of the Doctoral School in Economic Informatics, https://sdie.ase.ro/membri/
2015-Jan.	2019-2022 Lecturer at the Bucharest University of Economic Studies, Faculty of
2022	Cybernetics, Statistics and Economic Informatics, Romania; 2015-2019 Assistant Professor
	at the Bucharest University of Economic Studies, Faculty of Cybernetics, Statistics and
	Economic Informatics, Romania.

Project management experience

(Academic sector/research institutes/industrial sector/public sector/other. Please list the most relevant.)

Principle Investigator, project responsible or director – 7 projects as Consortium Coordinator or PI

Year	Project title - Role - Funder - Budget - link to project webpage
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2024-2027	A Business Model-Oriented Platform with Applications for Developing Local Electricity
	Markets and Accelerating Clean Energy Transition (SMART-LEM), Consortium
	Coordinator, Clean Energy Transition Partnership (CETP 2022), 230,000 EUR,
	https://smartlem.ase.ro/;https://cetpartnership.eu/calls/funded-project/smart-lem
2024-2027	Service-oriented Open Platform for Citizen Energy Communities (OPEN4CEC),
	Consortium Coordinator, Driven Urban Transition (DUT Call 2022), 230,000 EUR,
	https://open4cec.ase.ro, https://dutpartnership.eu/funding-opportunities/dut_call_2022/
2024-2027	Valorisation and Integration of Extractive Waste towards the Sustainability of Raw
	Materials Industry (ValorWaste), Principal Investigator for ASE , ERA-MIN3 2023,
	100,000 EUR, https://valorwaste.ase.ro/;
2022-2024	Developing a Model-based Digital Twin Reference Architecture for Active Energy
	Consumers and Smart Communities (SMART-TWINS), Principal Investigator, PCE
	35/2022, PN-III-P4-PCE-2021-0334, 1.2 mil. RON; https://simonaoprea.ase.ro/smart-twins/
2019-2022	Multi-layer aggregator solutions to facilitate optimum demand response and grid flexibility
	(SMART-MLA), Principal Investigator for ASE, Funding agency: ERA-NET Co-fund
	under H2020, UEFISCDI, PNIII European and International Cooperation H2020, ERANET
	H2020, Contract 71/2018, 169,000 EUR, https://smart-mla.stimasoft.com/
2020-2022	Big data solutions in demand side management enhancing market strategies and settlement
	for distribution grid operators (BIGDATA4GRID), Principal Investigator , PN-III-P2-2.1-
	PED-2019-1198, 462PED/28.10.2020, 600,000 RON,
	https://simonaoprea.ase.ro/research/bigdata4grid/
2016-2018	Informatics solutions for electricity consumption analysis and optimization in smart grids
	(SMART-OPTIM), Consortium coordinator, Funding agency: UEFISCDI, PN-III-P2-2.1-
	BG-2016-0286, BRIDGE Grant, Partners: ASE (Romania)-coordinator, MET (Romania),
	Romanian-American University (Romania), Contract 77BG/2016, 100,000 EUR,
	https://sites.google.com/a/csie.ase.ro/smart-optim/

Project Member – <u>4 projects as Member</u>

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Year	Project title - Role - Funder - Budget - link to project webpage	
2016-2020	Intelligent system for trading on wholesale electricity market (SMARTRADE), Member,	
	Competitiveness Operational Programme (COP) 2014-2020, Contract 62/2016, Co-financed	
	by European Regional Development Fund (ERDF), Funding agency: ANCSI, Total amount:	
	1.200.000 EURO, http://smartrade.ase.ro/	
2016-2018	Informatics solution for optimization of technical procedures of photovoltaic power plants	
	(OPTIMPV), Member , PN-III-P2-2.1-PTE-2016-0032, Increasing the Competitiveness of	
	the Romanian Economy through Research, Development and Innovation, Subprogram 2.1.	
	Competitiveness through Research, Development and Innovation, Transfer to Economic	
	Operator Competition (PTE), funded by National Authority for Scientific Research and	
	Innovation – UEFISCDI, Romania, 100,000 EUR, Project responsible,	
	http://www.icpe.ro/ro/optimpv/	
2014-2017	Intelligent system for predicting, analyzing and monitoring performance indicators and	
	business processes in the field of renewable energies (SIPAMER), Member , PNII - PCCA	
	2013, code 0996, no. 49/2014 funded by National Authority for Scientific Research and	
	Innovation – UEFISCDI, Romania, 348,000 EUR.	
2010-2013	IT solutions for assisting the decision-making process in uncertain environments and with	
	less predictable developments in order to integrate into grid, Member, PNII-TE, Code: 332,	
	Contract 44/2010, Funding agency: UEFISCDI, 140,000 EURO.	

Other relevant professional experiences

(e.g. institutional responsibilities, organisation of scientific meetings, membership in academic societies, review boards, advisory boards, committees and major research or innovation collaborations, other commissions of trust in public or private sector)

Year	Description - Role
2021-	Expert for ESF Science Connect: https://www.esf.org/community-of-experts/
present	
2023-	Member of the International Editorial Review Board of the Oeconomia Copernicana Journal
present	(Q1 Business and International Management): https://journals.economic-
	research.pl/oc/about/editorialTeam
2023-	Member in the Technical Committee 6.3. Power and Energy Systems of the International
present	Federation of Automatic Control (IFAC): https://tc.ifac-control.org/6/3/members/overview
2021-	Guest Editor for the following journals: Sensors, Electronics, Sustainability
present	
2022,	Expert for the Slovak Research and Development Agency (SRDA)
2023	Expert for the Bulgarian National Science Fund (BNSF)

Awards

Year	Award	
2024	"Mattei Dogan" Award in Social Science and Economy, Research Team, Romanian	
	Research Gala, MINISTRY OF RESEARCH, INNOVATION AND DIGITALIZATION,	
	https://www.mcid.gov.ro/gala-cercetarii-romanesti/	
2017	"Research of the year" Award, Excellence Gala, Bucharest University of Economic Studies	
2021, 2022,	Opera Omnia Awards for scientific publications in Q1, Bucharest University of Economic	
2023	Studies	
2020, 2021,	Georgescu-Roegen Awards for scientific publications in Q2, Bucharest University of	
2023	Economic Studies	
2019	Top reviewers in Engineering - September 2019; Top reviewers in Cross-Field - September	
	2019 from Clarivate WoS https://www.webofscience.com/wos/author/record/1181099	
2017-2023	Awarding of research results for scientific publications in Q1, Q2 – Web of Science articles	
	PRECISI-2017, PRECISI-2018, PRECISI-2019, PRECISI-2020, PRECISI-2021, PRECISI-	
	2023, UEFISCDI	

Track record of the last 10 years

The complete list can be found: https://scholar.google.com/citations?user=hIKefqAAAAAJ&hl=en

- 1) Bâra A., **Oprea**, SV, Embedding the Weather Prediction Errors (WPE) into the PV Forecasting Method using Deep Learning. *Journal of Forecasting*, Wiley, 2024
- 2) **Oprea**, SV, Bâra A., On-grid and Off-grid Photovoltaic Systems Forecasting using a Hybrid Meta-learning Method, *Knowledge and Information Systems*, Springer, 2024
- 3) Bâra A., **Oprea**, SV, A Value Sharing Method for Heterogenous Energy Communities Archetypes, Volume 27, Issue 1, 2024, 108687, ISSN 2589-0042, https://doi.org/10.1016/j.isci.2023.108687, *iScience*, 2024
- 4) Bâra A., **Oprea**, SV, Enabling Coordination in Energy Communities: A Digital Twin Model, Volume 184, 113910, *Energy Policy*, https://authors.elsevier.com/a/liAus14YGgpcuM, Elsevier, 2024
- 5) **Oprea**, SV, Bâra A., A stacked ensemble forecast for photovoltaic power plants combining deterministic and stochastic methods. *Applied Soft Computing*, Vol. 147, 2023, https://doi.org/10.1016/j.asoc.2023.110781
- 6) Bâra, A., **Oprea**, SV. & Tudorică, B.G. From the East-European Regional Day-Ahead Markets to a Global Electricity Market. *Computational Economics* (2023). https://doi.org/10.1007/s10614-023-10416-0
- 7) Bâra, A., **Oprea**, SV. Intelligent system to optimally trade at the interference of multiple crises. *Applied Intelligence* (2023). https://doi.org/10.1007/s10489-023-04823-x, Springer, 2023

- 8) **Oprea**, S-V., Bâra, An Edge-Fog-Cloud Computing Architecture for IoT and Smart Metering Data, *Peer-to-Peer Networking and Applications*, Springer, 2022
- 9) **Oprea**, S-V., Bâra, A., Mind the gap between PV generation and residential load curves: Maximizing the roof-top PV usage for prosumers with an IoT-based Adaptive Optimization and Control Module, *Expert Systems with Applications*, Volume 212, February 2023, 118828, https://doi.org/10.1016/j.eswa.2022.118828
 10) S.V. **Oprea**, Bara, A, Ultra-short-term forecasting for photovoltaic power plants and real-time key performance indicators analysis with big data solutions. Two case studies PV Agigea and PV Giurgiu located in Romania, *Computers in Industry*, Volume: 120, https://doi.org/10.1016/j.compind.2020.103230, 2020 Patent applications: Bâra, A., **Oprea**, SV., Tor OB, Preotescu D., "Sistem informatic integrat şi metode pentru managementul consumului şi producției de energie electrică pentru simularea şi tranzacționarea pe piețele de energiei electrică", A/00549/21.01.2021, BOPI 09/2021

01.09.2024