CURRICULUM VITAE Personal information

Name, Surname:	Bara Adela		
Date of birth:	11.10.1978	Sex:	F
Nationality:	Romanian		
Researcher unique identifier(s)	Researcher unique identifier(s) <u>https://orcid.org/0000-0002-0961-352X</u>		
ORCID, Researcher ID etc.): <u>https://scholar.google.com/citations?hl=ro&user=EyuTSOQAAA/</u>		SOQAAAAJ	
URL for personal website (if	https://adela-bara.ase.ro		
case):			

Education

Year	Faculty/department - University/institution - Country
2015	Habilitation in Economic Informatics, Bucharest University of Economic Studies, Romania
2007	Ph.D. in Cybernetics, Bucharest University of Economic Studies, Romania
2003	Master in Economic Informatics, Bucharest University of Economic Studies, Romania
2002	Bachelor in Economic Informatics and Cybernetics, Bucharest University of Economic Studies,
	Romania

Positions - current and previous

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

Year	Job title – Employer - Country
2015-	Professor - Department of Economic Informatics and Cybernetics, Faculty of
present	Economic Cybernetics, Statistics and Informatics, Bucharest University of Economic
	Studies (ASE), Romania
	<i>PhD Supervisor</i> – main supervisor for more than 10 PhD students, subject areas: Big
	Data, Internet of Things, Artificial Intelligence.
2002-2015	Assistant professor (2002-2008), lecturer (2008-2013), associate professor (2013-
	2015) – Department of Economic Informatics and Cybernetics, Faculty of Economic
	Cybernetics, Statistics and Informatics, Bucharest University of Economic Studies
	(ASE), Romania

Project management experience

(Academic sector/research institutes/industrial sector/public sector/other. Please list the most relevant.) *Principle Investigator, project responsible or director*

Year	Project title - Role - Funder - Budget - link to project webpage
2024-2027	A Business Model-Oriented Platform with Applications for Developing Local
	Electricity Markets and Accelerating Clean Energy Transition (SMART-LEM) –
	Clean Energy Transition Partnership (CETP 2022), 230000EUR, Co-PI,
	https://smartlem.ase.ro/

2024-2027	Service-oriented Open Platform for Citizen Energy Communities (OPEN4CEC),
	Driven Urban Transition (DUT Call 2022), 230000 EUR, Co-PI,
	https://open4cec.ase.ro
2022-2024	Developing a Model-based Digital Twin Reference Architecture for Active Energy
	Consumers and Smart Communities (SMART-TWINS), PCE 35/2022, PN-III-P4-PCE-
	2021-0334, 1.2 mil. RON, Co-PI; https://simonaoprea.ase.ro/smart-twins/
2016-2020	Intelligent system for trading on wholesale electricity market (SMARTRADE),
	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, Project responsible,
	http://smartrade.ase.ro/
2016-2018	Informatics solution for optimization of technical procedures of photovoltaic power
	plants (OPTIMPV), project code 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, 100000
	EUR, Project responsible, <u>http://www.icpe.ro/ro/optimpv/</u>
2014-2017	Intelligent system for predicting, analysing and monitoring performance indicators
	and business processes in the field of renewable energies (SIPAMER), PNII - PCCA
	2013, code 0996, no. 49/2014 funded by National Authority for Scientific Research
	and Innovation – UEFISCDI, Romania, 348.000 EUR, PI
2010-2013	IT solutions for assisting the decision-making process in uncertain environments and
	with less predictable developments in order to integrate into grid, PNII-TE, Code:
	332, Contract 44/2010, Funding agency: UEFISCDI, 140.000 EURO, PI
-	

Project Member

Year	Project title - Role - Funder - Budget - link to project webpage
2024-2027	Valorisation and Integration of Extractive Waste towards the Sustainability of Raw
	Materials Industry (ValorWaste), ERA-MIN3 2023, 100000 EUR, Scientific Board
	member, <u>https://valorwaste.ase.ro/</u>
2020-2022	Big data solutions in demand side management enhancing market strategies and
	settlement for distribution grid operators (BIGDATA4GRID), PN-III-P2-2.1-PED-
	2019-1198, 462PED/28.10.2020, 600000 RON, Scientific and technical board
	member, https://simonaoprea.ase.ro/research/bigdata4grid/
2019-2022	Multi-layer aggregator solutions to facilitate optimum demand response and grid
	flexibility (SMART-MLA), Funding agency: ERA-NET Co-fund under H2020,
	UEFISCDI, PNIII European and International Cooperation H2020, ERANET
	H2020, , Contract 71/2018, 169000 EUR, Scientific team leader: https://smart-
	mla.stimasoft.com/
2016-2018	Informatics solutions for electricity consumption analysis and optimization in smart
	grids (SMART-OPTIM), 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, 100000 EUR,
	member, https://sites.google.com/a/csie.ase.ro/smart-optim/

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
2023 -	Member of the Scientific Council of the Doctoral School in Economic Informatics, ASE
present	
2022-	Expert for ESF Science Connect
present	
2023-	Member of the International Editorial Review Board of the Oeconomia Copernicana
present	Journal (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
present	International Federation of Automatic Control (IFAC) : <u>https://tc.ifac-</u>
	control.org/6/3/members/overview
2021-	Guest Editor for the following journals: Sensors, Electronics, Sustainability
present	
2010 -	Editor in Chief - Database Systems Journal, http://dbjournal.ro
present	
2010 -	Director of the Center of Excellence in Data Science, ASE Bucharest,
present	https://eertis.eu/ersv-2200-000m-8590
2014-	Expert evaluator at UEFISCDI, Romania
2016	

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,	Opera Omnia Awards for scientific publications in Q1, Bucharest University of
2022,	Economic Studies
2023	
2020,	Georgescu-Roegen Awards for scientific publications in Q2, Bucharest University of
2021,	Economic Studies
2023	
2017-	Awarding of research results for scientific publications in Q1, Q2 – Web of Science
2023	articles PRECISI-2017, PRECISI-2018, PRECISI-2019, PRECISI-2020, PRECISI-
	2021, PRECISI-2023, The Executive Unit for the Financing of Higher Education,
	Research, Development and Innovation (UEFISCDI)

Recent articles:

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 Metalearning Method, *Knowledge and Information Systems*, Springer, 2024
- Bâra A., Oprea, SV, A Value Sharing Method for Heterogenous Energy Communities Archetypes, iScience, Volume 27, Issue 1, 2024, 108687, ISSN 2589-0042, https://doi.org/10.1016/j.isci.2023.108687, *iScience*, 2024
- Bâra A., Oprea, SV, Enabling Coordination in Energy Communities: A Digital Twin Model, Volume 184, January 2024, 113910, *Energy Policy*, <u>https://authors.elsevier.com/a/liAus14YGgpcuM</u>, Elsevier, 2024
- Oprea, SV, Bâra A., A stacked ensemble forecast for photovoltaic power plants combining deterministic and stochastic methods. *Applied Soft Computing*, Volume 147, November 2023, Page 110781, <u>https://doi.org/10.1016/j.asoc.2023.110781</u>, Elsevier, 2023
- Bâra, A., Oprea, SV. & Tudorică, B.G. From the East-European Regional Day-Ahead Markets to a Global Electricity Market. *Computational Economics* (2023). <u>https://doi.org/10.1007/s10614-023-10416-0</u>
- 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 https://link.springer.com/article/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
- 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
- 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, Article Number: 103230, DOI: 10.1016/j.compind.2020.103230, September 2020

Recent patent applications:

 Bâra, A., Oprea, SV., Tor OB, Preotescu D., SISTEM INFORMATIC INTEGRAT ȘI METODE PENTRU MANAGEMENTUL CONSUMULUI ȘI PRODUCȚIEI DE ENERGIE ELECTRICĂ PENTRU SIMULAREA ȘI TRANZACȚIONAREA PE PIEȚELE DE ENERGIEI ELECTRICĂ, A/00549/21.01.2021, BOPI 09/2021