



## PERSONAL INFORMATION

## Cristian Gheorghiu



📍 [REDACTED]

Bucharest (Romania) 📞 [REDACTED]

[REDACTED]

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Sex Male | Date of birth [REDACTED] | Nationality Romanian

## WORK EXPERIENCE

2021–Present

**Freelance Energy Consultant**

- National Resilience and Recovery Plant (NRRP) consultancy on all energy related calls
- Large Infrastructure Operational Programme (LIOP) consultancy
- Energy Management Systems designing,
- Electric designing,
- Complex Energy Auditing,
- Complex engineering consultancy projects,
- Opportunity / Feasibility studies,
- Electrical systems analysis,
- Electrical measurements,
- Power Quality Analysis.

**Business or sector** Consultancy

2018–Present

**University teaching assistant**

University POLITEHNICA of Bucharest

313 Splaiul Independenței,

Bucharest (Romania)

<https://upb.ro>

- Scientific Research and Development;
- **Electrical Part of Powerplants and Substations** teaching assistant,
- **Power Distribution Equipment** teaching assistant,
- **Electric Equipment** teaching assistant,
- **Applied Informatics** teaching assistant,
- Topics covered in teaching process:
  - Health and Safety Regulations for working in electrical installations,
  - Design and Execution of electrical installations (primary equipment),
  - Maintenance of low voltage installations,
  - Power Quality and Energy measurements in low voltage installations,
  - Technic and Economic analysis,
  - Etc.

**Business or sector** Education

2016–2021

**Energy engineer**

ELSACO ESCO LLC  
300 Mihai Bravu, District 5,  
Bucharest (Romania)  
[www.elsaco.com](http://www.elsaco.com)

- Large Infrastructure Operational Programme (LIOP) consultancy
- Energy Auditing;
- Complex engineering consultancy projects;
- Opportunity / Feasibility studies;
- Electrical systems analysis;
- Electrical measurements;
- Power Quality Analysis.

**Business or sector** Professional, scientific and technical activities

2014–2020

**Chief executive officer**

DATA CERT PLUS LLC  
Iuliu Maniu Blvd., Bucharest (Romania)

- Market research;
- Engineering consultancy projects;
- Electrical Designing.

**Business or sector** Professional, scientific and technical activities

## EDUCATION AND TRAINING

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2021	<b><u>Galileo Master Certificate in Energy Storage</u></b> The Renewable Energy Institute - Certified energy storage professional,
2019	<b><u>Complex Energy Auditor</u></b> Romanian Energy Regulatory Authority - Authorization no. 686/14.08.2019,
2018–Present	<b><u>Doctorate in Electrical Engineering</u></b> University POLITEHNICA of Bucharest, Bucharest (Romania) - Energy Efficiency expertise; - Power Quality expertise; - Renewable Energy Sources expertise; - Machine Learning and AI expertise; - Power flow optimization expertise; - Energy Management Systems expertise; - Micro Grid / Smart Grid expertise.
2016–2018	<b><u>Masters Degree in Energy Efficiency</u></b> University POLITEHNICA of Bucharest, Bucharest (Romania) - Complex Energy Auditing; - Power Quality Analysis; - Power transport and distribution grid transit analysis; - Technical-economic analysis for the energy sector.
2012–2016	<b><u>Power Engineering Bachelor's Degree</u></b> University POLITEHNICA of Bucharest, Bucharest (Romania) - Complex Energy Auditing; - Mathematical Analysis, Calculus, Chemistry, Physics; - Electrical Engineering; - Thermal Engineering; - Fluid Engineering; - Electrical and non electrical measurements; - Power transport and distribution; - Economics.

## PERSONAL SKILLS

Mother tongue(s)	Romanian				
Foreign language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
French	B1	B2	B1	B1	B1
Norwegian	A2	B1	A2	A2	B1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user [Common European Framework of Reference for Languages](#)

**Communication skills** Great Communications and Negotiations skills gained through my experience as a technical consultant and as a teaching assistant;

**Organizational / managerial skills** Leadership good Organizational skills gained as a technical consultant / project manager in power engineering consultancy projects.  
Good team-leading skills gained as a teaching assistant and by leading various consultancy teams.

**Job-related skills** Great understanding of energy efficiency and power quality concepts (energy auditing, energy balances, energy performance improvement actions, technical-economic analysis of the aforementioned actions etc.);  
Great understanding of power generation, distribution and use from both conventional and unconventional energy sources;

**Membership and Affiliation** **SAMER** (Energy Auditors and Energy Managers Romanian Association) Junior responsible,  
Member of the **Romanian Hydrogen Association**,  
Member of the **World Energy Council – Romanian National Committee**.

## Digital skills

## SELF-ASSESSMENT

Information processing	Communication	Content creation	Safety	Problem-solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Digital skills - Self-assessment grid

- Great command of Microsoft Office suite;
- Great command of AutoCAD suite;
- Great command of various simulations tools such as:
  - RetSCREEN,
  - NEPLAN,
  - ETAP,
  - Mathlab,
  - Simulink,
  - Transys,
  - PVSol\*,
  - PVSyst,
- Great PC assisted electrical designing, simulations and analysis; Good mentoring skills, obtained as a teaching assistant;

**Driving license** B1, B, BE

## Annex 1. Previous Work

### A1. Scientific Papers

#### A1.1. ISI Indexed Scientific Papers (WOS)

1. **Cristian GHEORGHIU**, Ștefan GHEORGHE, Mircea SCRIPCARIU, Radu PORUMB, Gabriela Nicoleta SAVA, "The Power Quality Indices influence on the Economics and the Energy Efficiency of industrial end-users," 2021 International Conference on Applied and Theoretical Electricity (ICATE), [WOS:000709089900053](#), May 2021.
2. **Cristian GHEORGHIU**, Mircea SCRIPCARIU, Ștefan GHEORGHE, Radu PORUMB, "Development of a Practical Technic-Economic Methodology for the design stage of EV charging stations integrated in Power Distribution Grid," UPB Scientific Bulletin, Series C, Vol. 83, Iss.1, ISSN 2286-3540, march 2021.
3. Ioan-Sevastian BITIR-ISTRATE, **Cristian GHEORGHIU**, Miruna CASTRAVETE, "The Cost of Indecision in Energy Efficiency. A Cost of Opportunity Analysis for an industrial consumer," 55th International Scientific Conference on Information, Communication and Energy Systems and Technologies (ICEST 2020), DOI: [WOS:000632707400034](#), September 2020.
4. **Cristian GHEORGHIU**, Mircea SCRIPCARIU, Ștefan GHEORGHE, Gabriela Nicoleta SAVA, "Energy Performance Improvement Actions for Power Distribution Networks in University Campuses," 2019 International Conference on Energy and Environment (CIEM), [WOS:000630902700077](#), October 2019.
5. **Cristian GHEORGHIU**, Mircea SCRIPCARIU, Ioan-Sevastian BITIR-ISTRATE, Aida NENIU, "The Environmental Impact Reduction obtained by implementing an Energy Management System. The advantages of using Energy Management and Energy Savings Standards when performing Industrial Energy Audits," 8th Conference on Thermal Equipment, Renewable Energy and Rural Development (TE-RE-RD 2019), [WOS:000619989000074](#), June 2019.
6. **Cristian GHEORGHIU**, Mircea SCRIPCARIU, Ioan BITIR-ISTRATE, Aida NENIU, "Demand – Side Management Programs – A joint environmental protection action. Case Study – The Lighting System in the Campus of the University POLITEHNICA of Bucharest," 8th Conference on Thermal Equipment, Renewable Energy and Rural Development (TE-RE-RD 2019), [WOS:000619989000073](#), June 2019.
7. Aida DELCEA, Ioan-Sevastian BITIR-ISTRATE, Roxana PĂTRAȘCU, **Cristian GHEORGHIU**, "Joint energy and water management scheme for water supply systems in Romania," Conference on Sustainable Solutions for Energy and Environment (EENVIRO), [WOS: 000468021200054](#), June 2019.
8. **Cristian GHEORGHIU**, Mircea SCRIPCARIU, Ștefan GHEORGHE, Radu PORUMB, "Energy Efficiency and Power Quality Indicators of a Micro Grid. Case Study: Lighting Systems," 8th International Conference on Modern Power Systems (MPS), [WOS:000630902700077](#), May 2019.

#### A1.2. BDI Indexed Scientific Papers (DOI)

1. Mircea SCRIPCARIU, **Cristian GHEORGHIU** et al., "Reducing the Environmental Impact of Industrial End-Users by using Cost Exemption Schemes. Lessons Learned from an Energy Management Perspective," 2021 10th International Conference on ENERGY and ENVIRONMENT (CIEM), 2021, pp. 1-5, doi: 10.1109/CIEM52821.2021.9614791.
2. Bogdan LEU, **Cristian GHEORGHIU** et al., "Laboratory for Digital Technologies Testing and Skills Development of Professionals And Students," 2021 10th International Conference on ENERGY and ENVIRONMENT (CIEM), 2021, pp. 1-4, doi: 10.1109/CIEM52821.2021.9614771.
3. Oana CONSTANTINESCU, **Cristian GHEORGHIU**, "Big Data Concept implementation for energy consumption," EMERG, Vol. 7, Nr. 2, pp. 129-140, DOI: 10.37410/EMERG.2021.2.11, July 2021.
4. **Cristian GHEORGHIU**, Mircea SCRIPCARIU, Miruna GHEORGHIU, Alexandra Gabriela DOBRICĂ, "Energy efficiency in the building materials industry. Case study: Brick manufacturing in Romania," 10th International Conference on Thermal Equipment, Renewable Energy and Rural Development (TE-RE-RD 2021), DOI: 10.1051/e3sconf/202128602006, July 2021.
5. Mircea SCRIPCARIU, **Cristian GHEORGHIU**, Miruna GHEORGHIU, Alexandra Gabriela DOBRICĂ, "Improving energy performance of a Cement Manufacturing factory by using Waste Heat Recovery Systems, Estimated vs.

- Actual achievements," 10th International Conference on Thermal Equipment, Renewable Energy and Rural Development (TE-RE-RD 2021), DOI: 10.1051/e3sconf/202128601007, July 2021.
6. **Cristian GHEORGHIU**, Mircea SCRIPCARIU, Ștefan GHEORGHE, Miruna GHEORGHIU, Alexandra Gabriela DOBRICĂ, "The impact of Power transformers on the Energy Performance Indicators of the power distribution grids of industrial end-users transitioning towards environmental sustainability," 9<sup>th</sup> International Conference on Modern Power Systems (MPS 2021), DOI: 10.1109/MPS52805.2021.9492714, June 2021.
  7. Ioan-Sevastian BITIR-ISTRATE, **Cristian GHEORGHIU**, Miruna Gheorghiu, "The transition towards the environmental sustainability of Cryptocurrency mining processes," 6th International Conference on Sustainable and Renewable Energy Engineering (2021) – accepted for publication, May 2021.
  8. Mircea SCRIPCARIU, **Cristian GHEORGHIU**, Ioan-Sevastian BITIR-ISTRATE, Mihaela-Mădălina BONEA, "Transforming Romanian school buildings in prosumers. An opportunity for increasing the energy efficiency in electrical networks and reducing the environmental impact of the power distribution sector," 9th Conference on Thermal Equipment, Renewable Energy and Rural Development (TE-RE-RD 2020), DOI: <https://doi.org/10.1051/e3sconf/202018002009>, June 2020.
  9. Mircea SCRIPCARIU, **Cristian GHEORGHIU**, Ion TRIȘTIU, Alexandra-Gabriela DOBRICĂ, "The smart transition of Power Transmission Network needed for the sustainable development of Bucharest City," 9th Conference on Thermal Equipment, Renewable Energy and Rural Development (TE-RE-RD 2020), DOI: <https://doi.org/10.1051/e3sconf/202018004008>, June 2020.

## A2. Engineering and Technical Consultancy Projects – Extract

1. Feasibility Study for developing a 4.99 MWp PV Powerplant for DOMINO'S PIZZA MAXIM L.L.C. – Cernica Site, June 2022,
2. Feasibility Study for developing a 5.63 MWp PV Powerplant for DOMINO'S PIZZA MAXIM L.L.C. – Buftea Site, May 2022,
3. Feasibility Study for developing a 2.63 MWp PV Powerplant for SOLAR ENERGY INDEPENDENȚA L.L.C., May 2022,
4. Feasibility Study for developing a 5.4 MWp PV Powerplant for SOLAR ENERGY ȘENDRENI L.L.C., April 2022,
5. Feasibility Study for developing a 0.99 MWp PV Powerplant for H.ESSERS L.L.C., April 2022,
6. Feasibility Study for developing a 0.99 MWp PV Powerplant for SMITHFIELD ROMANIA L.L.C., April 2022,
7. Feasibility Study for developing a 0.99 MWp PV Powerplant for NIMET L.L.C., April 2022,
8. Feasibility Study for developing a 0.99 MWp PV Powerplant for MASCHIO GASPARDINO L.L.C., April 2022,
9. Feasibility Study for developing a 0.56 MWp PV Powerplant for NEWTONE LABORATORIES L.L.C., April 2022,
10. Feasibility Study for developing a 110 MWp PV Powerplant for COPPER BEECH URBAN DEVELOPMENT INC., March 2022,
11. Feasibility Study for developing a 14 MWp PV Powerplant for ROMSTAL, March 2022,
12. Complex Energy Audit for the entire energy boundary of H. ESSERS L.L.C., March 2022,
13. Feasibility Study for developing a 5.9 MWp PV Powerplant for GREEN SOLAR POWER L.L.C., February 2022,
14. Feasibility Study for developing a 7.5 MWp PV Powerplant for FOTOVOLTAIC PROD & DISTRIBUTION L.L.C., February 2022,
15. Feasibility Study for developing a 9.52 MWp PV Powerplant for POWER REGENERABIL ENERGY L.L.C., February 2022,
16. Feasibility Study for developing a 9.99 MWp PV Powerplant for ALFA GREEN ENERGY L.L.C., February 2022,
17. Feasibility Study for developing a 9.99 MWp PV Powerplant for VIABLE ENERGY L.L.C., February 2022,
18. Electricity Audit for obtaining a renewed power distribution tariff for NEW ENERGY MANAGEMENT L.L.C., January 2022,
19. Technical extrajudicial expertise for FRAMAN L.L.C., Bacău, January 2022,
20. Feasibility Study for developing a Rooftop PV Powerplant for H.ESSERS L.L.C., January 2022,
21. Feasibility Study for developing a Rooftop PV Powerplant for CROCO L.L.C., December 2021,
22. Complex Energy Audit for the entire energy boundary of the Emergency Military Hospital "Dr. Ion Jianu", Pitești, December 2021
23. Complex Energy Audit for the entire energy boundary of the Sport Complex and Student Campus "CCS LACUL TEI", Bucharest, November 2021

24. Feasibility Study for developing a 150 MW / 2.100 MWh BESS system for ALRO S.A., August 2021,
25. Feasibility Study for developing a Green H<sub>2</sub> production site for dual-fuel usage in a 12 MWe high efficiency Gas Turbine for ALUM S.A., August 2021,
26. Feasibility Study for implementing a 0,99 MWp PV Powerplant at ELECTROALFA INTERNATIONAL production site, August 2021,
27. Feasibility Study for implementing a 0,99 MWp PV Powerplant at ALESD production site for HOLCIM S.A., July 2021,
28. Complex Energy Audit for the entire energy boundary of BUZAU production site for AGRANA S.A., July 2021,
29. Complex Energy Audit for the entire energy boundary of the Romanian Automotive Register Company, June 2021,
30. Complex Energy Audit for the entire energy boundary of ALPLA S.A., June 2021,
31. Complex Energy Audit for the entire energy boundary of CTP Industrial Park, June 2021,
32. Electrical designing for a 6 MW/6,3 MWh energy storage system for RAFO ONEȘTI S.A., May 2021,
33. Feasibility Study for implementing a high efficiency combined heat and power powerplant at ALUM S.A., March 2021,
34. Electricity Audit for non-refundable financing by Electric-Up national program for MERIDIAN DANCE 2000 L.L.C., January 2021,
35. Electricity Audit for non-refundable financing by Electric-Up national program for BB ALVA PREST L.L.C., January 2021,
36. Electricity Audit for non-refundable financing by Electric-Up national program for CRS GLASS DESIGN L.L.C., January 2021,
37. Electricity Audit for non-refundable financing by Electric-Up national program for PROFCENTER L.L.C., January 2021,
38. Complex Energy Audit for DANEȘ, LUNCA and ȚIGMANDRU Compression / Drying Stations belonging to ROMGAZ S.A., December 2020,
39. Feasibility Study for implementing an intelligent monitoring and verification system for CARMISTIN L.L.C. November 2020,
40. Complex Energy Audit for the entire energy boundary of ROMARM S.A. – CUGIR MECHANICAL FACTORY., November 2020,
41. Complex Energy Audit for the entire energy boundary of TOM Constana – METROPOLIS INVESTIȚII IMOBILIARE L.L.C., October 2020,
42. Complex Energy Audit for the entire energy boundary of S.R.C.C. RENTCOM L.L.C., October 2020,
43. Feasibility Study for implementing an intelligent monitoring and verification system for ALUM S.A. October 2020,
44. Complex Energy Audit for the entire energy boundary of VICTORIA INVEST ROMANIA L.L.C., September 2020,
45. Feasibility Study for implementing an intelligent monitoring and verification system for ANA & CORNEL L.L.C., August 2020,
46. Power Quality Analysis for the headquarters of CEZ COGEALAC, August 2020,
47. Complex Energy Audit for the entire energy boundary of ELECTROPUTERE MALL CRAIOVA S.A., July 2020,
48. Complex Energy Audit for the entire energy boundary of VODAFONE ROMANIA S.A., June 2020,
49. Feasibility Study for implementing an intelligent monitoring and verification system for DIANA L.L.C., May 2020,
50. Electric designing for a new Handmade Furniture Factory, SPH3RA CONSULTING L.L.C., May 2020,
51. Technical extrajudicial expertise for XALADINE ENERGY L.L.C. (PV powerplant), May 2020,
52. Technical extrajudicial expertise for COURTYARD BY MARRIOT, May 2020,
53. Energy Audit (as per HG 495/2014) for VIMETCO EXTRUSION L.L.C., April 2020,
54. Energy Audit (as per HG 495/2014) for ALUM S.A., April 2020,
55. Energy Audit (as per HG 495/2014) for ALRO S.A., April 2020,
56. Prefeasibility Study for implementing a high-efficiency combined heat and power powerplant at ALUM S.A., March 2020,
57. Technical State Audit of Building B317 of the IGPR Headquarters, March 2020,
58. Feasibility Study for implementing an intelligent monitoring and verification system for CONTITECH L.L.C., March 2020,
59. Feasibility Study for implementing an intelligent monitoring and verification system for DIANA L.L.C., February 2020,
60. Technical extrajudicial expertise for PANDURI MEDICAL CENTER, February 2020,

61. Feasibility Study for implementing an intelligent monitoring and verification system for AAYLEX PROD L.L.C., January 2020,
62. Complex Energy Audit for the entire energy boundary of IKEA ROMANIA S.A., December 2019,
63. Complex Energy Audit for the entire energy boundary of DANFOS DISTRICT HEATING L.L.C., November 2019,
64. Complex Energy Audit for the entire energy boundary of SONDEX PRODUCTION L.L.C., November 2019,
65. Complex Energy Audit for the entire energy boundary of COS TARGOVISTE S.A., November 2019,
66. Complex Energy Audit for the entire energy boundary of DOLY-COM DISTRIBUTIE L.L.C., October 2019
67. Electrical Designing of the energy supply of SYNERGY LAND DEVELOPMENT, October 2019
68. Complex Energy Audit for the entire energy boundary of COMPA S.A., October 2019
69. Complex Energy Audit for the entire energy boundary of BETTY ICE S.A., September 2019
70. Power Quality Analysis for the entire energy boundary of MAXSAFE L.L.C., August 2019
71. Technical extrajudicial expertise for ICTCM S.A., July 2019
72. Complex Energy Audit for the entire energy boundary of WIENERBERGER SISTEME DE CARAMIZI L.L.C. – Triteni, July 2019
73. Complex Energy Audit for the entire energy boundary of WIENERBERGER SISTEME DE CARAMIZI L.L.C. – Gura Ocnitei, July 2019
74. Complex Energy Audit for the entire energy boundary of DAMEN SHIPYARDS MANGALIA L.L.C., June 2019
75. Opportunity Study for evaluating the necessary investments for developing the EV charging infrastructure in Ilfov Region, CJ ILFOV, July 2019
76. Complex Energy Audit for the entire energy boundary of AFGD TANDAREI L.L.C., May 2019
77. Complex Energy Audit for the entire energy boundary of CARMEUSE HOLDING L.L.C. - FIENI, April 2019
78. Complex Energy Audit for the entire energy boundary of CARMEUSE HOLDING L.L.C. - CÂMPULUNG, April 2019
79. Complex Energy Audit for the entire energy boundary of the residential Building on Str. Florilor 43, Snagov, Jud. Ilfov, march 2019
80. Complex Energy Audit for the entire energy boundary of CARMEUSE HOLDING L.L.C. - DEVA, March 2019
81. Complex Energy Audit for the entire energy boundary of ALUM S.A., March 2019
82. Complex Energy Audit for the entire energy boundary of ALRO S.A., March 2019
83. Verification of obtained energy savings for the entire energy boundary of S.C. COMPA S.A., February 2019
84. Complex Energy Audit for the entire energy boundary of DELTA L.L.C., February 2019
85. Complex Energy Audit for the entire energy boundary of BRENTAG L.L.C., February 2019
86. Complex Energy Audit for the entire energy boundary of FF GROUP L.L.C., January 2019
87. Electrical Designing of the energy supply of UNIVERSITY POLITEHNICA OF BUCHAREST, December 2018
88. Complex Energy Audit for the entire energy boundary of ELIT L.L.C., December 2018
89. Complex Energy Audit for the entire energy boundary of VERICOM 2001 L.L.C., October 2018
90. Complex Energy Audit for the entire energy boundary of EUROCLINIC HOSPITAL S.A., October 2018
91. Complex Energy Audit for the entire energy boundary of RECON S.A., October 2018
92. Annual Energy Efficiency Improvement Strategy for VERICOM 2001 L.L.C., September 2018
93. Complex Energy Audit for the entire energy boundary of CENTRUL MEDICAL UNIREA L.L.C. , September 2018
94. Solution Study for developing a PV Power Generation Plant for FEDERAL MOGUL S.A., September 2018
95. Complex Energy Audit for the entire energy boundary of COTROCENI PARK L.L.C., September 2018
96. Complex Energy Audit for the entire energy boundary of SMITHFIELD ROMANIA L.L.C., august 2018
97. Complex Energy Audit for the entire energy boundary of RCS & RDS S.A., July 2018
98. Complex Energy Audit for the entire energy boundary of PUBLITRANS 2000 L.L.C., June 2018
99. Feasibility Study for modifying and optimizing the production and distribution of steam on the UMC II industrial platform, CUGIR, June 2018;
100. Energy Performance Contract design for C&A COMPANY L.L.C., May 2018;
101. Complex Energy Audit for the entire energy boundary of TIMKEN ROMÂNIA S.A., May 2018;
102. Complex Energy Audit for the entire energy boundary of ROMCARTON S.A., may 2018;
103. Complex Energy Audit for the entire energy boundary of Feldioara Subsidiary of C.N.U. București S.A., march 2018;
104. Complex Energy Audit for the entire energy boundary of UNICEF ROMÂNIA O.N.U. HOUSE, November 2017;
105. Complex Energy Audit for the entire energy boundary of Iași Subsidiary of RADIOCOMUNICAȚII S.A., august 2017;
106. Power Factor Compensation System design for EL QUATRO BUTIQUE HOTEL S.A., July 2017;
107. Electricity Balance for all five buildings of Timișoara Business Centre – NEPI România, November 2016.