



## Curriculum Vitae

### Personal information

First name(s) / Surname(s) Lucian – Nicolae Pintilie  
 Telephone(s) 0264366442 / +40757890597  
 Fax(es) -  
 E-mail [Lucian.Pintilie@emd.utcluj.ro](mailto:Lucian.Pintilie@emd.utcluj.ro) / [pintilie\\_luci@yahoo.com](mailto:pintilie_luci@yahoo.com)  
 Nationality Romanian  
 Date of birth 1.10.1993

### Work experience

Dates	2016 - Present
Name and address of employer	Technical University of Cluj – Napoca, str. Memorandumului nr. 28 – Cluj Napoca – Romania 400114
Occupation or position held	Electrical Engineer
Main activities and responsibilities	Laboratory teaching, researching, and maintenance activities
Dates	2017 - 2022
Name and address of employer	Technical University of Cluj – Napoca, str. Memorandumului nr. 28 – Cluj Napoca – Romania 400114
Occupation or position held	Master's degree student and engineer / PhD. student and engineer
Main activities and responsibilities	Researching activities within the project POC "MICROINV" – "Microinverters with high power density and high efficiency for renewable energy sources" (ID: P_40_391, MySMIS: 105616)
Dates	2018 - 2020
Name and address of employer	Technical University of Cluj – Napoca, str. Memorandumului nr. 28 – Cluj Napoca – Romania 400114
Occupation or position held	Electrical Engineer – Research Assistant / PhD. student
Main activities and responsibilities	Researching activities within the project POC "URBIVEL" – "Smart Electric Vehicle Technologies" (ID: P_40_333, MySMIS: 105565)
Dates	2021 - 2023
Name and address of employer	Technical University of Cluj – Napoca, str. Memorandumului nr. 28 – Cluj Napoca – Romania 400114
Occupation or position held	Electrical Engineer – Research Assistant / PhD. student
Main activities and responsibilities	Researching activities within the project POC "AROBS" – "Development by AROBS of a new test system for electronic central control units (ECUs) for vehicles" (MySMIS: 123359)
Dates	2023 - 2024
Name and address of employer	Technical University of Cluj – Napoca, str. Memorandumului nr. 28 – Cluj Napoca – Romania 400114
Occupation or position held	Electrical Engineer – Research Assistant / PhD. student
Main activities and responsibilities	Researching activities within the project CDI "SEICER" – "Development of an innovative electronic system for collecting energy from renewable sources" (MySMIS: 156450)

Dates	2022 - 2024
Name and address of employer	Technical University of Cluj – Napoca, str. Memorandumului nr. 28 – Cluj Napoca – Romania 400114
Occupation or position held	Electrical Engineer – Research Assistant / PhD. student
Main activities and responsibilities	Researching activities within the project “INO Hub DOC” - "Network of excellence in research and applied innovation for doctoral and postdoctoral study programs" POCU / 993/6 / 13 / 153437.

## Education and training

Dates	2018 - 2023
Title of qualification awarded	Doctoral PhD studies
Principal subjects / occupational skills	Electrical engineer with graduated doctoral studies
Name and type of organization providing education and training	Technical University of Cluj-Napoca, Faculty of Electrical Engineering, Department of Electrical Machines and Drives – division of Electronics and Power Electronics – TUCN IOSUD doctoral school

Dates	2016 - 2018
Title of qualification awarded	Master's degree
Principal subjects / occupational skills	Electrical engineer with graduated master's degree studies
Name and type of organization providing education and training	Technical University of Cluj-Napoca, Faculty of Electrical Engineering, Specialization – Advanced electrical systems and structures

Dates	2012 - 2016
Title of qualification awarded	Bachelor's degree
Principal subjects / occupational skills	Electrical engineer
Name and type of organization providing education and training	Technical University of Cluj-Napoca, Faculty of Electrical Engineering, Specialization – Instrumentation and Data Acquisition

Dates	2008 - 2012
Title of qualification awarded	High school graduation diploma
Principal subjects / occupational skills	Computer and Network Maintenance Technician and Operator
Name and type of organization providing education and training	Technical College “Victor Ungureanu” – Romania – Câmpia Turzii

Dates	2011 - 2012
Title of qualification awarded	Professional certificate
Principal subjects / occupational skills	Computer and Network Maintenance Technician and Operator
Name and type of organization providing education and training	Technical College “Victor Ungureanu” – Romania – Câmpia Turzii

## Personal skills and competences

Mother tongue(s) Romanian

Other language(s)

Self-assessment	Understanding		Speaking		Writing
<i>European level (*)</i>	Listening	Reading	Spoken interaction	Spoken production	
<b>English</b>	B2	B2	B1	B1	B1
<b>French</b>	-	-	-	-	-

## Didactic activity

Teaching Courses    Embedded systems I – Microprocessors based embedded systems  
                             Embedded systems II – Real-Time computing embedded systems  
                             Embedded systems III – FPGA and DSP based embedded systems  
                             Applied control and estimation methods in electrical drives

Training Mobility    -

Institutional Projects    "INO Hub DOC" – "Network of excellence in research and applied innovation for doctoral and  
(max 5 the most representative)    postdoctoral study programs" POCU / 993/6 / 13 / 153437.

## **Research**

National Grants    Patent pending "VARIABLE DC VOLTAGE FED MICROGRID AND ITS CONTROL METHOD" - RO  
(max 5 the most representative)    134348 AO – pending number: A 2019 00916, deposit date: 19.12.2019

Patent pending "Compensation method of reactive energy at the common coupling point as secondary electronic function" - RO 137573 AO - no. Application: A 2022 00528, deposit date 30.08.2022;

International Grants    -  
(max 5 the most representative)    -

- Scientific publications Vasile Mihai SUCIU, Sorin Ionuț SALCU, Lucian Nicolae PINTILIE, Petre Dorel TEODOSESCU – „Theoretical efficiency analysis of a buck – boost converter for wide voltage range operation” - ECAI 2018 – International Conference – Electronics, Computers and Artificial Intelligence, 28 – 30 June 2018 Iași, România, DOI: 10.1109/ECAI.2018.8679063.
- Lucian Nicolae PINTILIE, Ioana Cornelia GROS, Vasile Mihai SUCIU, Florin ROMAN – „Multifunctional socket for smart grid applications using Ethernet over Power Lines (EoP) and USB over IP (USB / IP) technologies” - ICATE 2018 – International Conference on Applied and Theoretical Electricity (ICATE), 4 – 6 October, 2018 Craiova, România, DOI: 10.1109/ICATE.2018.8551405.
- Lucian Nicolae PINTILIE, Titus POP, Ioana Cornelia GROS, Adrian Mihai luoraș – „ An I2C and Ethernet based open-source solution for home automation in the IoT context” - 2019 54th International Universities Power Engineering Conference (UPEC), București, România, 3 – 6 Septembrie 2019, DOI: 10.1109/UPEC.2019.8893583.
- Vasile Mihai Suci, Sorin Ionut Salcu, Alexandru Madalin Păcuraru, Lucian Nicolae Pintilie, Norbert Csaba Szekely and Petre Dorel Teodosescu - „Independent Double-Boost Interleaved Converter with Three-Level Output” – MDPI – Applied Science - Appl. Sci. 2021, 11, 5993.
- Norbert Csaba Szekely, Sorin Ionut Salcu, Vasile Mihai Suci, Lucian Nicolae Pintilie, Gheorghe Ioan Fasola, Petre Dorel Teodosescu – „Power Factor Correction Application Based on Independent Double-Boost Interleaved Converter (IDBIC)” – MDPI – Applied Sciences – 2022.
- Adrian Mihai luoraș, Sorin Ionuț Salcu, Vasile Mihai Suci, Lucian Nicolae Pintilie, Norbert Csaba Szekely, Mircea Bojan, Petre Dorel Teodosescu – „AC-DC Microgrid Analysis Using a Hybrid Real-Time HiL Approach” – Springer, Singapore – Proceedings of Seventh International Congress on Information and Communication Technology – page 589 - 600 – year of publication 2022.
- Vasile Mihai Suci, Lucian Nicolae Pintilie, Sorin Ionuț Salcu, Petre Dorel Teodosescu, Teodor Pana, Zsolt Mathe – „Analysis of an Independent Double Boost Interleaved Converter in a Renewable Energy Application” – Springer, Singapore – Proceedings of Seventh International Congress on Information and Communication Technology – page 539-548 – year of publication 2022.
- Vasile Mihai Suci, Lucian Nicolae Pintilie, Petre Dorel Teodosescu, Zsolt Mathe – „Analysis of an Independent Double-Boost Interleaved Converter Operating as Power Optimizer in a PV Application” – Springer, Singapore – Proceedings of Seventh International Congress on Information and Communication Technology – page 671-681 – year of publication 2022
- Cătălin - Cristian Petrovici, Lucian – Nicolae Pintilie, Norbert – Csaba Szekely, Adrian – Mihai luoraș, Ioana – Cornelia Gros, Dan Chiuzbăian – „Implementation of a remote controlled photovoltaic nano-grid” – EPE 2022 Iași
- Lucian - Nicolae Pintilie, Horia Cornel Hedeșiu, Călin Gheorghe Rusu, Ioana Cornelia Gros, Vasile Mihai Suci, Alexandru Mădălin Păcuraru - „FPGA based Real-Time simulation of FlyBack converter using graphical programming tools”, 10th Edition of Modern Power Systems, Cluj - Napoca, România, 21st - 23rd June, 2023.
- Lucian – Nicolae Pintilie, Horia – Cornel Hedeșiu, Călin – Gheorghe Rusu, Petre – Dorel Teodosescu, Călin – Ignat Mărginean, Sorin – Ionuț Salcu, Vasile – Mihai Suci, Norbert – Csaba Szekely and Alexandru – Mădălin Păcuraru – „Energy Conversion Optimization Method in Nano-Grids Using Variable Supply Voltage Adjustment Strategy Based on a Novel Inverse Maximum Power Point Tracking Technique (iMPPT)” – MDPI Electricity 2023, 4(4), 277-308; <https://doi.org/10.3390/electricity4040017>, Optimisation, Optimal Control and Nonlinear Dynamics in Electrical Power, Energy Storage and Renewable Energy Systems, 2nd Volume, Submission received: 14 September 2023 / Revised: 29 September 2023 / Accepted: 1 October 2023 / Published: 10 October 2023, Electricity, EISSN 2673-4826, Published by MDPI;
- Pintilie C. Lucian – Nicolae – „CERCETĂRI CARE VIZEAZĂ MANAGEMENTUL ENERGIEI ELECTRICE ÎN SISTEME ELECTRONICE CU SURSE REGENERABILE” – Teză de doctorat, Conducător științific: Prof. Dr. Ing. Călin – Gh. RUSU, Data susținerii publice: 22.09.2023, an emitere Ordin de Ministru 2023, Școala Doctorală a Universității Tehnice din Cluj-Napoca 2023 (<https://rei.gov.ro/>);

## Additional information

Awards -

Membership of  
Professional Societies -

Other relevant activities -

## Significant books published in the last 10 years (max 10)

Ioana Cornelia GROS, Lucian Nicolae PINTILIE, Teodor Crişan PANĂ – „Sisteme Embedded în inginerie electrică – Ghid de aplicaţii” – Editura UTPRESS, Cluj – Napoca, 2020, ISBN: 978-606-737-431-5.

Lucian – Nicolae Pintilie, Ioana – Cornelia Gros, Adrian – Mihai Iuoraş, Vasile – Mihai Suciu, Teodor – Crişan Pană – Aplicaţii cu sisteme microprogramabile în Inginerie Electrică” – editura UTPRESS, Cluj – Napoca, 2024 – ISBN: 978-606-737-722-4 (<https://biblioteca.utcluj.ro/files/carti-online-cu-coperta/722-4.pdf>).

**Significant papers published  
in the last 10 years (max 10)**

Vasile Mihai SUCIU, Sorin Ionuț SALCU, Lucian Nicolae PINTILIE, Petre Dorel TEODOSESCU – „Theoretical efficiency analysis of a buck – boost converter for wide voltage range operation” - ECAI 2018 – International Conference – Electronics, Computers and Artificial Intelligence, 28 – 30 June 2018 Iași, România, DOI: 10.1109/ECAI.2018.8679063.

Lucian Nicolae PINTILIE, Ioana Cornelia GROS, Vasile Mihai SUCIU, Florin ROMAN – „Multifunctional socket for smart grid applications using Ethernet over Power Lines (EoP) and USB over IP (USB / IP) technologies” - ICATE 2018 – International Conference on Applied and Theoretical Electricity (ICATE), 4 – 6 October, 2018 Craiova, România, DOI: 10.1109/ICATE.2018.8551405.

Lucian Nicolae PINTILIE, Titus POP, Ioana Cornelia GROS, Adrian Mihai luoraș – „An I2C and Ethernet based open-source solution for home automation in the IoT context” - 2019 54th International Universities Power Engineering Conference (UPEC), București, România, 3 – 6 Septembrie 2019, DOI: 10.1109/UPEC.2019.8893583.

Vasile Mihai Suci, Sorin Ionut Salcu, Alexandru Madalin Păcuraru, Lucian Nicolae Pintilie, Norbert Csaba Szekely and Petre Dorel Teodosescu - „Independent Double-Boost Interleaved Converter with Three-Level Output” – MDPI – Applied Science - Appl. Sci. 2021, 11, 5993.

Norbert Csaba Szekely, Sorin Ionut Salcu, Vasile Mihai Suci, Lucian Nicolae Pintilie, Gheorghe Ioan Fasola, Petre Dorel Teodosescu – „Power Factor Correction Application Based on Independent Double-Boost Interleaved Converter (IDBIC)” – MDPI – Applied Sciences – 2022.

Adrian Mihai luoraș, Sorin Ionuț Salcu, Vasile Mihai Suci, Lucian Nicolae Pintilie, Norbert Csaba Szekely, Mircea Bojan, Petre Dorel Teodosescu – „AC-DC Microgrid Analysis Using a Hybrid Real-Time HiL Approach” – Springer, Singapore – Proceedings of Seventh International Congress on Information and Communication Technology – page 589 - 600 – year of publication 2022.

Vasile Mihai Suci, Lucian Nicolae Pintilie, Sorin Ionuț Salcu, Petre Dorel Teodosescu, Teodor Pana, Zsolt Mathe – „Analysis of an Independent Double Boost Interleaved Converter in a Renewable Energy Application” – Springer, Singapore – Proceedings of Seventh International Congress on Information and Communication Technology – page 539-548 – year of publication 2022.

Vasile Mihai Suci, Lucian Nicolae Pintilie, Petre Dorel Teodosescu, Zsolt Mathe – „Analysis of an Independent Double-Boost Interleaved Converter Operating as Power Optimizer in a PV Application” – Springer, Singapore – Proceedings of Seventh International Congress on Information and Communication Technology – page 671-681 – year of publication 2022

Cătălin - Cristian Petrovici, Lucian – Nicolae Pintilie, Norbert – Csaba Szekely, Adrian – Mihai luoraș, Ioana – Cornelia Gros, Dan Chiuzbăian – „Implementation of a remote controlled photovoltaic nano-grid” – EPE 2022 Iași

Lucian - Nicolae Pintilie, Horia Cornel Hedeșiu, Călin Gheorghe Rusu, Ioana Cornelia Gros, Vasile Mihai Suci, Alexandru Mădălin Păcuraru - „FPGA based Real-Time simulation of FlyBack converter using graphical programming tools”, 10th Edition of Modern Power Systems, Cluj - Napoca, România, 21st - 23rd June, 2023.

Lucian – Nicolae Pintilie, Horia – Cornel Hedeșiu, Călin – Gheorghe Rusu, Petre – Dorel Teodosescu, Călin – Ignat Mărginean, Sorin – Ionuț Salcu, Vasile – Mihai Suci, Norbert – Csaba Szekely and Alexandru – Mădălin Păcuraru – „Energy Conversion Optimization Method in Nano-Grids Using Variable Supply Voltage Adjustment Strategy Based on a Novel Inverse Maximum Power Point Tracking Technique (iMPPT)” – MDPI Electricity 2023, 4(4), 277-308; <https://doi.org/10.3390/electricity4040017>, Optimisation, Optimal Control and Nonlinear Dynamics in Electrical Power, Energy Storage and Renewable Energy Systems, 2nd Volume, Submission received: 14 September 2023 / Revised: 29 September 2023 / Accepted: 1 October 2023 / Published: 10 October 2023, Electricity, EISSN 2673-4826, Published by MDPI;

Cluj-Napoca,  
Date: September 2024

Name and signature:  
Lucian – Nicolae Pintilie