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EDUCATION:

- **PhD in Electrical Engineering.** Department of Electrical & Computer Engineering, University of Cyprus, Cyprus, September 2017.
- **MSc Energy Technologies and Sustainable Design.** Interdepartmental Programme, School of Engineering, University of Cyprus, Cyprus, May 2012.
- **MEng in Electrical & Computer Engineering.** Department of Electrical & Computer Engineering, School of Engineering, Democritus University of Thrace, Greece, October 2010.

EMPLOYMENT:

Research Associate: PSM Lab, Department of Electrical & Computer Engineering, University of Cyprus, Cyprus Sept. 2012 – Ongoing

Teaching Assistant: Department of Electrical & Computer Engineering, University of Cyprus, Cyprus Sept. 2012 – Apr. 2017

RESEARCH INTERESTS:

- Power system economics
- Energy policy
- Retail markets
- Engineering Cost/Benefit Analysis and Risk Management of Renewable Energy Penetration
- Retail tariff design under increased Renewable Energy Penetration

LIST OF PUBLICATIONS:

Peer Reviewed Journal Papers:

1. **A.I. Nikolaidis**, P. Mancarella and C.A. Charalambous, “ A Graph-Based Loss Allocation Framework for Transactive Energy Markets: Facilitating Bidirectional Power Exchanges Between Consumers and Prosumers,” accepted extended abstract submitted to *IEEE Transactions on Power Systems*, Special Issue CFP, full paper version currently under review.
2. **A.I. Nikolaidis** and C.A. Charalambous, “Hidden Cross-subsidies of Net Energy Metering Practice: Energy Distribution Losses Reallocation due to Prosumers’ and Storsumers’ Integration,” submitted to *IET Generation, Transmission and Distribution*, vol. 11, no. 9, pp. 2204-2211, 2017.
3. **A.I. Nikolaidis** and C.A. Charalambous, “Hidden Financial Implications of the Net Energy Metering Practice in an Isolated Power System: Critical Review and Policy Insights,” *Renewable and Sustainable Energy Reviews*, vol. 77, pp. 706-717, 2017
4. **A.I. Nikolaidis**, I. Koumparou, G. Makrides, V. Efthymiou, G.E. Georghiou and C. A. Charalambous, “Reliable integration of a concentrating solar power plant in a small isolated system through an

appropriately-sized battery energy storage system," *IET Renewable Power Generation*, January 2016, DOI: [10.1049/iet-rpg.2015.0337](https://doi.org/10.1049/iet-rpg.2015.0337).

5. **A.I. Nikolaidis**, A. Milidonis and C. A. Charalambous, "Impact of Fuel-Dependent Electricity Retail Charges on the Savings Value of Net-Metered PV Applications in Vertically Integrated Systems". *Energy Policy*, 2015, DOI:10.1016/j.enpol.2015.01.010.
6. C.A. Charalambous, A Milidonis, A. Lazari and **A.I. Nikolaidis**, "Loss Evaluation and Total Ownership Cost of Power Transformers—Part I: A Comprehensive Method," *IEEE Transactions on Power Delivery*, vol. 28, no. 3, pp. 1870–1880, July 2013.
7. **A.I. Nikolaidis**, F.G. Longatt and C.A. Charalambous, "Indices to Assess the Integration of Renewable Energy Resources on Transmission Systems," *Journal of Conference Papers in Energy*, vol. 2013, Article ID 324562, 8 pages, 2013. doi:10.1155/2013/324562, July 2013. (*selected for journal publication - best papers of POEM 2012 Conference).

Refereed International Conference Papers:

1. **A.I. Nikolaidis**, M. Panteli and C.A. Charalambous, "Distribution Loss Factors for the Emerging, Open-Access Electricity Market of Cyprus," final paper accepted to appear in IEEE PowerTech 2017, Manchester, UK.
2. M. Panteli, **A.I. Nikolaidis**, Y. Zhou, F.R. Wood, S. Glynn, C.A. Charalambous, and P. Mancarella, "Analyzing the Resilience and Flexibility of Power Systems to Future Demand and Supply Scenarios", in Proc. IEEE Mediterranean Electro-technical Conference (MELECON), 18-20 April, 2016, Limassol, Cyprus.
3. **A.I. Nikolaidis** and C. A. Charalambous, "A Critical Analysis of the Net Metering Practice in Cyprus", in Proc. IEEE Energy Conference (ENERGYCON 2016), 4-8 April 2016, Leuven, Belgium.
4. **A.I. Nikolaidis** and C. A. Charalambous, "Action Steps for Refining the Cyprus National Action Plan on RES Penetration for Electricity Generation- *should we reconsider?*", in Proc. Power Options for the Eastern Mediterranean Region Conference (POEM 2013), 7-8, October 2013, Nicosia, Cyprus.

Book Chapters:

1. **A.I. Nikolaidis**, F. Gonzalez-Longatt and Charalambos A. Charalambous, "Indices to Assess the Integration of Renewable Energy Resources on Standard Test Networks through DIGSILENT's Programming Language (DPL)" in "*PowerFactory Applications for Power System Analysis*", Publisher: Springer, 2015.
<http://www.springer.com/computer/theoretical+computer+science/book/978-3-319-12957-0>

Major Technical/Consulting Reports:

1. **A.I. Nikolaidis** and C.A Charalambous, "*Evaluation and Derivation of Distribution Loss Factors for the Emerging Electricity Market Rules in Cyprus*", Final Consulting Report submitted for Distribution System Operator (DSO) of Cyprus, Funded by Distribution System Operator (CY), May 2017.
2. **A.I. Nikolaidis** and C.A Charalambous, "*Identifying the hidden costs of the Net Metering Practice in Cyprus and extrapolating their impact on losses cost/benefit allocation analysis*", Final Consulting Report submitted for Distribution System Operator (DSO) of Cyprus, Funded by Distribution System Operator (CY), March 2016.
3. **A.I. Nikolaidis** and C.A Charalambous, "Analysis of the Present and Future Power Distribution System in Cyprus: Substation load time series for 2014, 2020 and 2030", Final Consulting Report submitted for Joint Research Centre, Funded by European Commission (EC), February 2016.

4. **A.I. Nikolaidis** and C.A Charalambous, “Analysis of the Present and Future Power Distribution System in Cyprus: Identification of reference low voltage (LV) feeders”, Final Consulting Report submitted for Joint Research Centre, Funded by European Commission (EC), January 2016.
5. **A.I. Nikolaidis**, C.A Charalambous et al “*Reliable Integration of Helios Power Plant in the Cyprus Power System*”, Final Consulting Report submitted for Helios Project, Funded by Green+ NER 300 (EC, EIB, CY), December 2014.

SCHOLARSHIPS:

1. **Project Title: Engineering a Socio-Intelligent Class of Energy Users**
 - Funding Agency: University of Cyprus Grant “New Researchers” to support PhD Candidates (Awarded to C.A. Charalambous and **Alexandros I. Nikolaidis**), Feb. 2015- Feb 2016, €12,000 (Euros).

RESEARCH PROJECTS:

1. **Project Title: Analysis of the Present and Future Power Distribution System in Cyprus (GRID30)**
 - Funding Agency: Joint Research Centre, European Commission, July 2015–Feb. 2016.
2. **Project Title: Engineering a Socio-Intelligent Class of Energy Users**
 - Funding Agency: University of Cyprus Grant “New Researchers” to support PhD Candidates (Awarded to C.A. Charalambous and **Alexandros I. Nikolaidis**), Feb. 2015–Feb 2016, €12,000 (Euros).
3. **Project Title: Identifying The Hidden Costs of Net Metering Practices and Extrapolating Their Impact on Losses Cost and Benefit Allocation (HIDNET)**
 - Funding Agency: Distribution System Operator (DSO), Cyprus, Jan. 2015–Apr. 2016, ~€40,000 (Euros).
4. **Project Title: Evaluation and Derivation of Distribution Loss Factors for the Emerging Electricity Market Rules in Cyprus (EAC-DLF)**
 - Funding Agency: Distribution System Operator (DSO), Cyprus, Sep. 2016–Dec. 2017, ~€35,000 (Euros).

INDUSTRIAL CONSULTING PROJECTS:

1. *For Helios Project, Funded by Green+ NER 300 (EC, EIB, CY), Nicosia, Cyprus, October 2014*
“Helios Solar Power Plant Integration in Cyprus Power System” (Principle Investigators: G.E. Georgiou, Venizelos Efthimiou and C. A. Charalambous).
 - Sizing Storage Requirements for Integrating Helios Solar Power Plant in Cyprus Power System and Energy Market.

TEACHING EXPERIENCE:

- ECE 680: Power System Analysis (Winter Semester 2012)
- ECE 681: Power Systems: Operation & Control (Spring Semester 2013)
- ECE 203: Electric Circuits & Measurements lab (Winter Semester 2013)
- ECE 102: Analysis of Circuits & Networks (Spring Semester 2014)
- ECE 105: Applied Engineering: Analysis and Modeling (Winter Semester 2015, Winter and Spring Semester 2017)

- ECE 341: Electrical Machines Laboratory (Spring Semester 2016)
- Co-supervised three undergraduate theses and one graduate (MSc) thesis regarding NEM practices and RES compensation schemes for Cyprus.