



## Curriculum Vitae Europass

### Informații personale

Nume / Prenume **Marinov Corneliu**  
Adresa(e) Bucuresti (Romania)  
E-mail(uri) corneliu.marinov@upb.ro  
Naționalitate(-tăți) Romana  
Data nașterii 06 august 1947  
Sex Bărbătesc

### Experiența profesională

Perioada 1993 → Prezent  
Funcția sau postul ocupat Profesor  
Activități și responsabilități principale Cursuri: Bazele Electrotehnicii, Teoria Circuitelor, Electromagnetism, Modelare și Simulare, Algoritmi genetici.  
Numele și adresa angajatorului Universitatea Politehnica Bucuresti  
313 Splaiul Independentei, Bucuresti (Romania)

### Educație și formare

### Aptitudini și competențe personale

Limba maternă **Romana**

Limbi străine cunoscute

Autoevaluare  
Nivel european (\*)

**Engleză**

**Engleza**

Înțelegere				Vorbire				Scriere	
Ascultare		Citire		Participare la conversație		Discurs oral			
C1	Utilizator experimentat	C1	Utilizator experimentat	C1	Utilizator experimentat	C1	Utilizator experimentat	B2	Utilizator independent
C2	Utilizator experimentat	C2	Utilizator experimentat	C2	Utilizator experimentat	C2	Utilizator experimentat	C2	Utilizator experimentat

(\*) [Cadrlui european comun de referință pentru limbi](#)

Permis de conducere B

### Informații suplimentare

CARTI:  
Books:

1. C. A. Marinov. Introduction to Signal Analysis, Circuits and Systems, Lecture Notes, Jyvaskyla

University, Finland, 1998.

2. C. A. Marinov and P. Neittaanmaki. *Mathematical Models in Electrical Circuits: Theory and Applications*, Kluwer Academic Publishers, Dordrecht, Boston 1991.

Referred in:

□ A. H. Zemanian, Book review, in *Bull. Amer. Math. Soc.*, vol. 26, no.1, Jan., Pages 194-198, 1993.

□ P. R. Shepherd, Book review, in *Microelectronics Journal*, vol. 1, 1992.

3. C. A. Marinov. *Applications of Dissipative Operators in Electrical Circuit Theory*, Lecture Notes, Lappeenranta University of Technology, Finland, 1985.

4. C. A. Marinov. *Electrotehnica si Electronica*, Student Textbook, Pol. Univ. Bucharest, 1984, (in Romanian).

#### ARTICOLE REVISTA:

1. R. L. Costea and C.A. Marinov, "New accurate and flexible design procedure for a stable KWTA continuous time network", *IEEE Transactions on Neural Networks*, Vol. 22, No.9, pp.1357-1367, 2011.
2. C. A. Marinov and R. L. Costea, "Time-Oriented Synthesis for a WTA Continuous Time Neural Networks Affected by Capacitive Cross-Coupling", *IEEE Transactions on Circuits and Systems I: Regular Papers*, Vol. 57, No. 6, pp. 1358-1370, June 2010
3. C.A.Marinov, "Dynamical Systems modeling computational circuits" *Mathematical Reports* vol. 9 (59),No 1, pages 55-60, 2007
4. C.A. Marinov and J.J.Hopfield. Stable Computational Dynamics for a Class of Circuits with  $O(N)$  Interconnections Capable of KWTA and Rank Extractions. *IEEE Transactions on Circuits and Systems.Part I :Regular Papers*, Vol 52, No.5, Pages 949-959, 2005.
5. C. A. Marinov and B. D. Calvert. Performance Analysis for a K-Winners-Take-All analog neural network: basic theory. *IEEE Transactions on Neural Networks*. Vol. 14, No. 4, Pages 766-780, 2003.
6. C. A. Marinov and B. D. Calvert. Sorting with dynamical systems of neural type. *Mathematical Reports*. Vol. 5(55), No. 4, Pages 333-342, 2003.
7. B. D. Calvert and C. A. Marinov. Another K-Winners-Take-All analog neural network. *IEEE Transactions on Neural Networks*. Vol.11, No.4, Pages 829-838, 2000.
8. C. A. Marinov. Monotone Operators Approach of Electrical Circuit Modeling, in C. Corduneanu and I. W. Sandberg eds, *Volterra Equations and Applications*, Gordon and Breach Science Publ., London, 1999.
9. C. A. Marinov and A. Rubio. The Energy bounds in RC Circuits. *IEEE Transactions on Circuits and Systems. Part 1 CAS* 46, No 6, Pages 663-666, 1999.
10. C. A. Marinov and C. Badianu. Iteratively improved bounds for RC circuits. *IEEE Transactions on Circuits and Systems. Part 1, CAS* 45, No 6, Pages 663-666, 1998.
11. C. A. Marinov. Transient Bounding in Circuits with distributed and lumped parameters. *IEEE Transactions on Circuits and Systems. Part 1 CAS* 45, No 1, Pages 11-25, 1998.
12. C. A. Marinov and P. N. Shivakumar. Delay time bounds for RC ladder networks. *IEEE*

13. P. N. Shivakumar, J. J. Williams, Q. Ye, and C. A. Marinov. On two sided bounds related to weakly diagonally dominant matrices with application to digital circuit dynamics. *SIAM J. Matrix Analysis Appl.* 17, No 2, Pages 298-312, 1996.
14. C. A. Marinov and A. Lehtonen. A dissipative operator in distributed parameter network dynamics, in *Qualitative Problems for Differential Equations and Control Theory*, C. Corduneanu (ed.), World Scientific Publishers, Singapore, Pages 243-250, 1995.
15. C. A. Marinov and G. Morosanu. Consistent models for electrical networks with distributed parameters. *Mathematica Bohemica* 117, No 2, Pages 113-122, 1992.
16. C. A. Marinov, P. Neittaanmaki, and J.P. Santanen. Bounds for the solution of a system of parabolic equations arising in circuit theory. *Computational and Applied Mathematics II: Differential Equations*, W.F. Ames and P. J. van der Houven (eds.), North Holland., Pages 185-192, 1992.
17. C. A. Marinov and J. P. Santanen. Bounds for the solution of a system of parabolic equations arising in circuit theory. *Computational and Applied Mathematics II: Differential Equations*, W.F. Ames and P.J. van der Houven (eds.), North Holland., Pages 185-192, 1992.
18. C. A. Marinov, P. Neittaanmaki, and J. P. Santanen. Signal delay for generally interconnected distributed structures. *Selected and extended papers of Nasescode VIII*, J. Miller (ed.), 1992.
19. G. Morosanu, C. A. Marinov, and P. Neittaanmaki. Well posed nonlinear problems in integrated circuits modeling. *Circuits Systems. Signal. Processing. (CSSP)* 10. Pages 53-69, 1991.
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21. C. A. Marinov. Dissipativity as a unified approach to Sandberg- Willson type properties of nonlinear transistor networks. *Int. J. Circuit. Theory. Appl.* 18, No 6, Pages 575-594, 1990.
22. C. A. Marinov and P. Neittaanmaki. A delay time bound for distributed parameter circuits with bipolar transistors. *Int. J. Circ. Th. Appl.* 18, No 1, Pages 99-106, 1990.
23. C. A. Marinov and P. Neittaanmaki. Asymptotical convergence evaluation for a parabolic problem arising in circuit theory. *Zeitschrift. Angew. Math. Mech.* 70, No 8, Pages 344-347, 1990.
24. C. A. Marinov and A. Lehtonen. Mixed type circuits with distributed and lumped parameters. *IEEE Transactions Circuit. Systems. CAS* 36, No 8, Pages 1080-1086, 1989.
25. C. A. Marinov and P. Neittaanmaki. Global delay time for general distributed networks with applications to timing analysis of digital MOS integrated circuits. *Int. J. Comp. Math. Electrical Electronic Eng., COMPEL* 8, No 1, Pages 17-37, 1989.
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29. C. A. Marinov. Truncation errors for infinite linear systems, IMA J. Num. Anal. 6, No 1, Pages 51-63, 1986.
30. C. A. Marinov. Approximation of solutions of nonlinear systems. Buletinul Inst. Pol. Bucuresti. Vol. XLVI-ÄXLVII, Pages 34-38, 1985.
31. C. A. Marinov. Qualitative properties of solutions of infinite differential systems via dissipativity, Nonlinear Analysis, Theory, Methods and Applications 8, No 5, Pages 441-455, 1984.
32. C. A. Marinov. Nonlinear Evolution Equations in Banach Spaces. MSc. thesis in Mathematics, Univ. of Bucharest, Department of Differential Equations, 1980.
33. D. Stanomir and C. A. Marinov. A hybrid formalism for resistive networks and its applications. Revue Roum. Sci. Tech. Electr. Energ. 24, No 1, Pages 89-97, 1979.
34. C. A. Marinov. Comments on "Some theorems on the dynamic response of nonlinear transistor networks", Revue Roum. Sci. Tech. Electr. Energ. 24, No 2, Pages 295-296, 1979.
35. C. A. Marinov. An estimate regarding the switching time of some nonlinear transistor circuits, Revue Roum. Sci. Tech. Electr. Energ. 24, No 3, Pages 533-536, 1979.
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39. C. A. Marinov. On the determination through bordering of the transient answer of some nonlinear dipoles. Revue Roum. Sci. Tech. Electr. Energ. 20, No 1, Pages 383-396, 1975.

#### ARTICOLE CONFERINTA:

1. R. L. Costea and C. A. Marinov, "Continuous time recurrent neural network designed for KWTA operation", 2011 International Joint Conference on Neural Networks – IJCNN 2011, pp. 86-89, San Jose, USA.
2. R. L. Costea and C. A. Marinov, "Recurrent neural networks as a KWTA selector: a synthesis procedure", IEEE International Symposium on Circuits and Systems - ISCAS 2011, pp.1093-1096, Rio de Janeiro, Brazilia, 2011.
3. R. L. Costea and C. A. Marinov, "K-WTA Selection Using a Recurrent Neural Network", Proceedings of Fourteenth International Conference on Cognitive and neural Systems, May 19-22, 2010, Boston, USA.
4. R. L. Costea and C.A. Marinov, "Time evaluation for WTA Hopfield type circuits affected by cross-coupling capacitances", in M. Koppen et al. (EDS), ICONIP 2008, Part II, LNCS 5507, p. 885-892,

Springer-Verlag Berlin Heidelberg, 2009.

5. R. L. Costea and C. A. Marinov, "Speed and correctness in computational neural circuits", Proceedings of Thirteenth International Conference on Cognitive and neural Systems, pp.128, May 27-30, 2009, Boston, USA.
6. R. L. Costea and C. A. Marinov, "Time evaluation for Hopfield type circuits affected by cross-coupling capacitances", 15th International Conference, ICONIP 2008, pp. 82-83, Nov. 2008, Auckland, New Zealand.
7. R. L. Costea and C. A. Marinov, "Time-problem in Hopfield neural networks with parasitic capacitances", International Symposium on Electronics and Telecommunication ETC'08, Eight Edition, 25-26 September, 2008, Timisoara, Romania. Published in "Buletinul Stiintific al Universitatii Politehnica din Timisoara", Transactions on Electronics and Communications, Tom 53(67), Fascicola 1, 2008.
8. R. L. Costea and C. A. Marinov, "A neural maximum selector: explicit parameters set-up for time performance", The 5th International Mediterranean and Latin American Modeling Multi-Conference I3M 2008, The European Modeling & Simulation symposium EMSS 2008, pp. 348-352, September 17-19, 2008, Campora S. Giovanni, Italy, ISSN 978-88-903724-0-7.
9. R. L. Costea and C. A. Marinov, "Correct behavior and processing time for a WTA neural network under the influence of coupling capacitances", Proceedings of Twelfth International Conference on Cognitive and neural Systems, pp.117, May 14-17, 2008, Boston, USA.
10. R. L. Costea and C. A. Marinov, "Clocking and WTA design of a continuous time Hopfield net with parasitic capacitances", European Conference on Circuit Theory and Design, ECCTD2007, pp. 396-399, Seville, 26-30 August 2007, IEEE Catalog number 07EX1835C, ISBN 1-4244-1342-7.
11. R. L. Costea and C. Marinov, "Clocking a WTA network under capacitive coupling", International Symposium on Signals Circuits and Systems, ISSCS, pp. 273-274, Vol. 1, ISSCS, Iasi, 2007, IEEE Catalog number 07EX1678, ISBN 1-4244-0968-3.
12. R. L. Costea and C.A. Marinov, "The impact of capacitive faults on WTA performances", The 6-th International Conference on Scientific Computing in Electrical Engineering - SCEE2006, pp.148-149, Sinaia, Romania, September 2006.
13. R. L. Costea and C. A. Marinov, "Processing time and cross capacitive coupling for a Winner Take All circuit", International Conference Mixed Design of Integrated Circuits and Systems, Gdynia, Poland, pp.518-521, June 2006.
14. R.L.Costea and C.A.Marinov. Capacitive cross-coupling faults and WTA correct behaviour. Proceedings of 10th IEEE Workshop on Signal Propagation on Interconnects, Berlin, Germany May 2006, Pages 189-192, 2006.
15. C. A. Marinov, B. Calvert, R. Costea, V. Bucata. Time evaluation for analog KWTA processors. Proceedings of 4 th European Congress on Computational Methods in Applied Sciences and Engineering, ECOMAS 2004, Jyvaskyla, Finland . Vol.II , 663.pdf. ISBN 951-39-1869-6, 2004.
16. C. A. Marinov, R.Costea, V.Bucata. Extreme working conditions for a neural Selector. Proceedings of 4 th European Congress on Computational Methods in Applied Sciences and Engineering, ECOMAS 2004, Jyvaskyla, Finland . Vol.II , 664.pdf. ISBN 951-39-1869-6, 2004.
17. B. D. Calvert, C. A. Marinov, and R. Costea. Processing a sequence of lists with a KWTA analog neural network, in A. Murgu, G. E. Lasker (eds), Proc. Focus symposium on learning and adaptation in stochastic and statistical systems, Pages 6-12 .(at 13th Int. Conf. Systems Research, Informatics and Cybernetics, Baden-Baden, July 2001) Published by Int. Institute for Advanced Studies in Systems Research & Cybernetics, Univ. of Windsor, Canada, 2002.
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and K. Nagayo), Oradea University Printing House, Pages 11-18, Sept. 2001.

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23. C. A. Marinov. Qualitative problems in distributed parameters models of VLSI circuits. Invited paper at Sixteenth Annual Meeting of Canadian Applied Mathematics Society, Winnipeg, May 1996.

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25. P. N. Shivakumar, J. J. Williams, Q. Ye, and C. A. Marinov. On two sided bounds related to weakly diagonally dominant M matrices with application to digital circuit dynamics, Int. Congress Indust. and Appl. Math., Hamburg, July, 1995.

26. C. A. Marinov and J.P. Santanen. Iterative waveform relaxation bounds for general RC circuits, Proc. IEEE Int. Symp. Circ. Syst., ISCAS. London. Vol 5, Pages 149-152, 1994.

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33. C. A. Marinov and P. Neittaanmaki. Mathematical modeling of electrical circuits with distributed parameters, Proc. of 8th Conf. Control Syst. Comp. Sc., Bucharest, Pages 195-198, 1991.

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35. C. A. Marinov, P. Neittaanmaki, and V. Hara. A consistent model for the wiring delay of the MOS inverter. Proc. of European Conference on Circuit Theory and Design (ECCTD). Brighton, Pages 89-93, 1989.

36. P. Neittaanmaki, V. Hara, and C. A. Marinov. Numerical Approach for signal delay in general distributed networks. Proc. of IEEE International Symposium on Circuits and Systems (ISCAS), Espoo, Helsinki University of Technology, Pages 1353-1358, 1988.
37. C. A. Marinov. Sandberg type properties for nonlinear transistor networks, Proc. of European Conference on Circuit Theory and Design (ECCTD), Paris, Pages 53-58, 1987.
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39. C. A. Marinov, P. Neittaanmaki, and V. Hara. Numerical approach for signal delay in general distributed networks, Proc. of Int. Conf. on Numerical Analysis of Semiconductor Devices and Integrated Circuits (NASECODE), J. J. Miller (ed.), Boole Press, Dublin, Pages 307-312, 1987.
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43. C. A. Marinov. Delay time predicting for distributed parameter circuits. Proc. of Int. Conf. Control Systems Computer Sciences. Bucharest, Pages 100-104, 1985.
44. C. A. Marinov. P solutions of infinite differential systems. Proc. of Int. Workshop in Differential Equations and Control Theory. Bucharest, Pages 67-70, 1983.
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