



## Curriculum vitae Europass

### Personal Information

Name / Surname **Vernic Raluca-Ileana**  
E-mail rvernic@univ-ovidius.ro  
Nationality Romanian

### Occupational field

#### Professional experience

Period	<b>October 2019 - present</b>
Occupation or position held	Professor (full)
Name and address of employer	OVIDIUS University of Constanta, B-dul Mamaia 124, 900527
Type of business or sector	Education / Research
Period	<b>2008 – present</b>
Occupation or position held	Part time Researcher II
Name and address of employer	ISMMA Gheorghe Mihoc-Caius Iacob, Calea 13 Septembrie 13, Sector 5, 050711 București
Type of business or sector	Research
Period	<b>October 2005 - October 2019</b>
Occupation or position held	Associate professor
Name and address of employer	OVIDIUS University of Constanta, B-dul Mamaia 124, 900527
Type of business or sector	Education / Research
Period	<b>2006-2011, 2013</b>
Occupation or position held	Part time associate professor at the actuarial master
Name and address of employer	ASE Bucharest
Type of business or sector	Education
Period	<b>October 1999 – October 2005</b>
Occupation or position held	Lecturer
Name and address of employer	OVIDIUS University of Constanta, B-dul Mamaia 124, 900527
Type of business or sector	Education / Research
Period	<b>February 1996 – October 1999</b>
Occupation or position held	Assistant professor
Name and address of employer	OVIDIUS University of Constanta, B-dul Mamaia 124, 900527
Type of business or sector	Education / Research
Period	<b>February 1993 – February 1996</b>
Occupation or position held	Teaching assistant
Name and address of employer	OVIDIUS University of Constanta, B-dul Mamaia 124, 900527
Type of business or sector	Education / Research

Period	<b>September 1992 – February 1993</b>
Occupation or position held	High school teacher
Name and address of employer	National College “Mircea cel Batran”, Constanta, Romania

### Education and training

Period	<b>08.12.2016</b>
Qualification / diploma	Habilitation
Occupational skills obtained	PhD supervisor/advisor in mathematics (from 2017 at the Doctoral School of the Ovidius University)
Name and type of education institution / training provider	University of Bucharest / Faculty of Mathematics and Computers Science

Period	<b>1996-2000</b>
Qualification / diploma	PhD. Domain– MATHEMATICS
Principal studied subjects / occupational skills obtained	Actuarial modelling, Statistics and Probability models
Name and type of education institution / training provider	University of Bucharest / Faculty of Mathematics and Computers Science
National or international classification level	Doctoral studies

Period	<b>1987-1992</b>
Qualification / diploma	Bachelor of Science in Computer Science and Mathematics
Principal studied subjects / occupational skills obtained	Fundamentals in mathematics and computer science
Name and type of education institution / training provider	University of Bucharest / Faculty of Mathematics
National or international classification level	Graduate studies

### Personal skills and competences

Native language **Romanian**

Foreign language known **English, French**

Research grants, projects and scholarships	<p><b>2004:</b> Individual NWO (Dutch Organization for Scientific Research) research grant in actuarial mathematics at the University of Amsterdam</p> <p><b>2005-2006 and 2007-2008:</b> Member in 2 research grants of the Romanian Academy</p> <p><b>1996:</b> Scholarship at the Catholic University of Porto, in the E.U. project OUVERTURE/PETAL</p> <p><b>1994:</b> Member in the research contract of the Romanian Research Ministry no. 3031/B10 phase II/1994</p> <p><b>TEMPUS Scholarships:</b></p> <p>1995 Ecole Supérieure Universitaire de Gestion (ESUG) Toulouse (3 months)</p> <p>1992 Conservatoire National des Arts et Métiers (CNAM) and Pierre et Marie Curie University, Paris (4 months)</p>
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Technical skills and competences	<p>Mathematical – actuarial and financial mathematics, probability theory, statistics, mathematical logic, mathematical software. Research skills.</p> <p>Courses I am currently teaching: Probability and statistics, Optimization techniques, Modeling and simulation of banking and insurance phenomena, Statistical simulation techniques, Modeling and simulation of economic processes Some of the courses I have taught: Actuarial algorithms, Statistical processing of experimental data, Game theory, Mathematical models in insurance, Sampling theory and practice, Elements of computer science, The basics of computer science etc. Courses I have taught at the actuarial master of ASE Bucharest: Risk and Survival Models, Modeling Principles, Data Analysis.</p>
Computer use skills and competences	<p>Operating systems: Ms-DOS, Windows Programming languages: Pascal, Matlab Scientific and statistics: Scientific WorkPlace, Latex, Mathematica, SPSS, R.</p>
<b>Additional Information</b>	<p>Member of the Conference Organizing Committee, The 3rd International Conference on Combinatorics, Computability and Logic (DMTCS '01), Constanta, July 2001.</p> <p>Member of the Seminar Organizing Committee, ASTIN Seminar of Actuarial Mathematics, Faculty of Mathematics and Computer Science, University of Bucharest, October 30 – November 1, 2003.</p> <p>Professional Societies: member of the Romanian Statistical Society (SPSR) and Romanian Mathematical Society (SSMR).</p> <p>Invited professor at the universities: Louvain la Neuve, Belgium (2001); Concordia University Montreal and University of Waterloo, Canada (2005); York University, Toronto, Canada (2010); University of Barcelona, Spain (2006, 2015); University of Piraeus, Greece (2011), UNIL Lausanne, Switzerland (2016), KU Leuven, Belgium (2017).</p> <p>Member in 3 PhD defense commissions and in 4 PhD advice commissions.</p> <p>PhD advisor for 2 students.</p> <p>Over 30 license papers coordinated and over 30 dissertation (master) papers coordinated.</p> <p>2019 awards for performance in scientific research on faculty and on university.</p> <p>Over 50 professional research papers in conferences / journals with international recognition and 8 books (one at Springer: Sundt, B. and Vernic, R. (2009). Recursions for convolutions and compound distributions with insurance applications. EAA Lectures Notes, Springer).</p> <p>Peer-reviewer for prestigious journals: ASTIN Bulletin, Insurance: Mathematics&amp;Economics, North American Actuarial Journal, Statistics, Journal of Actuarial Practice, Journal of Computational and Applied Mathematics, Journal of Probability and Statistics, Journal of Applied Statistics, Annals of Actuarial Science, Scandinavian Actuarial Journal, Advances in Statistical Analysis, Statistics and Probability Letters, Journal of Probability, Journal of Statistical Theory and Practice, European Actuarial Journal, Information Technology And Control, SORT-Statistics and Operations Research Transactions, Metrika, Analele Universității din București – Seria Matematică și Informatică, Analele Universității din Constanța– Seria Matematică și Informatică, Analele Universității din Oradea-fasc. Mat., Revista de Studii Financiare, Applied Mathematics &amp; Information Sciences, Annals of Applied Biology etc.</p>

### Main papers

1. Goovaerts, M., Kaas, R., Laeven, R., Tang, Q. and Vernic, R (2005) - The tail probability of discounted sums of Pareto-like losses in insurance. Scandinavian Actuarial Journal vol. 2005 (6), 446-461.
2. Vernic, R. (2006) – Multivariate Skew-Normal distributions with applications in insurance. Insurance: Mathematics & Economics, vol. 38, no. 2, 413-426.
3. Dhaene, J.; Ribas, C. and Vernic, R. (2006) – Recursions for the individual risk model. Acta Mathematicae Applicatae Sinicae - English series, 14, 632-652.
4. Tang, Q. and Vernic, R. (2007) – The Impact on Ruin Probabilities of the Association Structure among Financial Risks. Statistics & Probability Letters, 77 (14), 1522-1525.
5. Bolance C., Guillen M., Pelican E. and Vernic R. (2008) – Skewed bivariate models and nonparametric estimation for the CTE risk measure. Insurance: Mathematics & Economics, 43 (3), 386-393.

6. Vernic, R., Teodorescu, S. and Pelican E. (2009) – Two LogNormal models for real data. *Analele Universității "Ovidius" Constanța, seria Matematică*, vol. XVII (3), 263 -279 (ISI proceedings of The 5th ICDSA Conference, June 15-18, Constanța 2009).
7. Vernic, R., Dhaene, J., Sundt, B. (2010) - Inequalities for the De Pril approximation to the distribution of the number of policies with claims. *Scandinavian Actuarial Journal* no. 4, 249–267.
8. Asimit, A., Furman, E. and Vernic, R. (2010) – On a Multivariate Pareto Distribution. *Insurance: Mathematics and Economics* 46, 308-316.
9. Vernic, R. (2011) – Tail Conditional Expectation for the Multivariate Pareto Distribution of the Second Kind: Another Approach. *Methodology and Computing in Applied Probability* Vol. 13 (1), 121-137.
10. Asimit, A., Furman, E., Tang, Q. and Vernic, R. (2011) – Asymptotics for Risk Capital Allocations based on Conditional Tail Expectation. *Insurance: Mathematics and Economics* 49 (3), 310-324.
11. Teodorescu, S. and Vernic, R. (2013) - On composite Pareto models. *Mathematical Reports* 15 (65), no. 1, 11-30.
12. Zbăganu, Gh. and Vernic, R. (2013) - On the fatal shock model. *Mathematical Reports* 15 (65), no. 2, 133-144.
13. Pelican E. and Vernic R. (2013) – Maximum-likelihood estimation for the multivariate Sarmanov distribution: simulation study. *International Journal of Computer Mathematics* 90 (9), 1958-1970.
14. Asimit, A., Furman, E. and Vernic, R. (2016) – Statistical inference for a new class of multivariate Pareto distributions. *Communications in Statistics – Simulation and Computation* 45 (2), 456-471.
15. Vernic, R. (2016) – On the distribution of a sum of Sarmanov distributed random variables. *Journal of Theoretical Probability* 29 (1), 118-142.
16. Raducan, A.-M., Vernic, R. and Zbaganu, Gh. (2015) – Recursive calculation of ruin probabilities at or before claim instants for non-identically distributed claims. *ASTIN Bulletin* 45 (2), 421-443.
17. Bahraoui, Z., Bolance C., Pelican E. and Vernic R. (2015) – On the bivariate Sarmanov distribution and copula. An application on insurance data using truncated marginal distributions. *SORT* 39 (2), 209-230.
18. Vernic, R. (2015) – On a conjecture related to the ruin probability for nonhomogeneous insurance claims. *Analele Universității "Ovidius" Constanța, seria Matematică* 23 (3), 209-220.
19. Robe-Voinea, E. and Vernic, R. (2017) – On a multivariate aggregate claims model with multivariate Poisson counting distribution. *Proceedings of the Romanian Academy - Series A*, 18 (1), 3-7.
20. Raducan, A.-M., Vernic, R. and Zbaganu, Gh. (2015) – On the ruin probability for nonhomogeneous claims and arbitrary inter-claim revenues. *Journal of Computational and Applied Mathematics* 290, 319-333.
21. Asimit, A., Vernic, R. and Zitikis, R. (2016) – Background risk models and stepwise portfolio construction. *Methodology and Computing in Applied Probability* 18 (3), 805-827.
22. Vernic, R. (2016) – Optimal investment with a constraint on ruin for a fuzzy discrete-time insurance risk model. *Fuzzy Optimization and Decision Making* 15 (2), 195-217.
23. Robe-Voinea, E. and Vernic, R. (2016) – Another approach to the evaluation of a certain multivariate compound distribution. *Analele Universității "Ovidius" Constanța, seria Matematică, Volume XXIV* 24 (3).
24. Vernic, R. (2017) – Capital allocation for Sarmanov's class of distributions. *Methodology and Computing in Applied Probability* 19 (1), 311-330.
25. Robe-Voinea, E. and Vernic, R. (2018) – Fast Fourier Transform for multivariate aggregate claims. *Computational and Applied Mathematics (COAM)* 37 (1), 205-219.
26. Raducan, A.-M., Vernic, R. and Zbaganu, Gh. (2017) – On a conjecture related to the ruin probability for nonhomogeneous exponentially distributed claims. *Scandinavian Actuarial Journal* vol. 2017 (5), 441-451.
27. Robe-Voinea, E. and Vernic, R. (2016) – On the recursive evaluation of a certain multivariate compound distribution. *Acta Mathematicae Applicatae Sinica (English Series)* 32 (4), 913–920.
28. Raducan, A.-M., Vernic, R. and Zbaganu, Gh. (2016) – Uper and lower bounds for a finite-type ruin probability in a nonhomogeneous risk process. *Proceedings of the Romanian Academy, Series A*, 17 (4), 287–292.
29. Ratovomirija, G., Tamraz, M. and Vernic, R. (2017) – On some multivariate Sarmanov mixed Erlang reinsurance risks: aggregation and capital allocation. *Insurance Mathematics and Economics* 74, 197-209.
30. Tamraz, M. and Vernic, R. (2018) – On the evaluation of multivariate compound distributions with continuous severity distributions and Sarmanov's counting distribution. *ASTIN Bulletin* 48 (2), 841-870.
31. Vernic, R. (2018) – On risk measures and capital allocation for distributions depending on parameters with interval or fuzzy uncertainty. *Applied Soft Computing* 64, 199-215.
32. Vernic, R. (2018) – On the evaluation of some multivariate compound distributions with Sarmanov's counting distribution *Insurance Mathematics and Economics* 79, 184-193.
33. Denuit, M. and Vernic, R. (2018) – Bivariate Bernoulli weighted sums and distribution of single-period tontine benefits. *Methodology and Computing in Applied Probability* 20(4), 1403–1416.
34. Bolance C. and Vernic R. (2019) - Multivariate count data generalized linear models: Three approaches based on the Sarmanov distribution. *Insurance Mathematics and Economics* 85, 89-103.
35. Vernic, R. (2020) – On a class of bivariate mixed Sarmanov distributions. *Australian & New Zealand Journal of Statistics*, to appear.
36. Mutali, S. and Vernic, R. (2020) – On the composite Lognormal-Pareto distribution with uncertain threshold. *Communications in Statistics – Simulation and Computation*, to appear.

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