

## CURRICULUM VITAE

### **Educatie si disertatii:**

- Abilitare in informatica cu teza “Word Sense Disambiguation with Application in Information Retrieval”, Universitatea din Bucuresti, 21 iunie, 2017;
- Doctorat in matematica cu teza “Analiza sensibilitatii unor modele statistice la prezenta valorilor de selectie discordante”, Universitatea din Bucuresti, 13 septembrie, 1996;
- B.S. in matematica si informatica, Universitatea din Bucuresti, Facultatea de Matematica, iunie 1984.

**Limbi straine:** - engleza - vorbit (foarte bine); scris (foarte bine)  
- franceza - vorbit (bine); scris (bine)

**Experienta profesionala:** Programator (1984-1993);  
Asistent (1993-1997);  
Lector (1997-2003);  
Conferentiar (2003 – prezent).

**Pozitia academica actuala:** Conferentiar in Departamentul de Informatica, Facultatea de Matematica si Informatica, Universitatea din Bucuresti

**ACTIVITATE DIDACTICA:** in prezent tine urmatoarele cursuri in cadrul Departamentului de Informatica, Facultatea de Matematica si Informatica, Universitatea din Bucuresti

- Sisteme expert - pentru studentii din anul al III-lea ai sectiei “Tehnologia informatiei”;
- Inteligenta artificiala - pentru studentii din anul al III-lea ai sectiei "Matematica-Informatica" si pentru studentii din anul al II-lea ai sectiei “Informatica”;
- Procesarea limbajului natural si tehnologia limbajului - pentru studenti la Master, anul I
- Semantica computationala cu aplicatii in regasirea informatiei – pentru studenti la Master, anul al II-lea.

**DOMENII DE INTERES STIINTIFIC: Inteligenta artificiala; Specializari:** Reprezentarea cunostintelor; Procesarea limbajului natural si tehnologia limbajului; Statistica computationala si analiza datelor cu aplicatii in procesarea limbajului natural si tehnologia limbajului.

**BURSE DE CERCETARE: FULBRIGHT Research Fellow** la **Universitatea Princeton** (1 februarie - 31 iulie, 2004). Studiul retelei semantice WordNet; coautor, impreuna cu George Miller si grupul sau de cercetare, al WordNet 2.1.

### **MEMBRU IN ASOCIATII PROFESIONALE; COEDITOR; EXPERT EVALUATOR:**

- **Membru ales** al **ISI** (International Statistical Institute)
- Membru al **GWA** (Global WordNet Association)

- Membru al **ANIRO** - Asociatia Nationala a Informaticienilor din Romania
- Member al **ARIA** - Asociatia Romana pentru Inteligenta Artificiala
- **Expert evaluator al Comisiei Europene** in domeniul Procesarii limbajului natural si tehnologiei limbajului
- **Coeditor** al "Open Computer Science", publicat de De Gruyter, Germania (anterior "Central European Journal of Computer Science", publicat de Versita si Springer Verlag)
- **Coeditor** al "International Journal on Information Technology", publicat de Praise Worthy Prize, Italia
- **Coeditor** al "International Journal on Computer and Communication Networks, Computational Intelligence and Data Analytics", publicat de Praise Worthy Prize, Italia
- **Editorial Review Board** "Artificial Intelligence Research", publicat de Sciedu Press, Canada

**PROFESOR INVITAT:** Universitatea din Toulouse Paul Sabatier III, Franta

**CERCETATOR INVITAT** la: Universitatea din Toulouse Paul Sabatier III, Franta; Institut de Recherche en Informatique de Toulouse, Franta; L'ecole Polytechnique "Polytech Montpellier", Franta; Heidelberg Institute for Theoretical Studies, Germania

**PROIECTE DE CERCETARE-DEZVOLTARE INTERNATIONALE:**

**1. Participare la proiectul international de cercetare-dezvoltare DBR-MAT** (German - Bulgarian - Romanian Machine Aided Translation) finantat de Fundatia Volkswagen, Germania. Program de cercetare care a inclus Universitatea din Hamburg, Academia de Stiinte din Bulgaria si Universitatea din Bucuresti, prin Facultatea de Matematica si Informatica, pentru o perioada de doi ani (1996-1998). Scopul general al proiectului DBR-MAT a fost investigarea si implementarea pilot a unui sistem de traducere asistata de calculator care combina o abordare bazata pe cunostinte cu metode statistice in prelucrarea limbajului natural. **Coordonator al echipei romane.**

**2. Participare la proiectul international BALRIC-LING** (BALkan Regional Information Centers for awareness and standardization of LINGuistic resources and tools for advanced HLT applications) finantat de Comisia Europeana (2001-2003). Participantii la proiect au fost Universitatea din Bucuresti, Academia de Stiinte Bulgara, Universitatea din Sofia, Universitatea din Sheffield si Institutul pentru Procesarea Limbajului si a Vorbirii din Atena. In cadrul de lucru al acestui proiect, Comisia Europeana a organizat doua Centre Regionale de Informare in domeniul procesarii limbajului natural si al tehnologiei limbajului, pentru intreaga regiune a Balcanilor. Unul dintre aceste centre a fost la Universitatea din Bucuresti. **Coordonator al echipei romanesti si director al Centrului Regional de Informare pentru zona Balcanilor organizat in Romania** (contract IST – 2000 – 26454).

**3. Participare la proiectul WordNet** al Laboratorului de Stiinte Cognitive de la Universitatea Princeton, S.U.A. A luat parte la proiectarea versiunii 2.1 a retelei semantice WordNet (**WN 2.1**). Contract de cercetare finantat de Advanced Research Development Activity (Programul AQUAINT, Faza 2, Nr. de contract NBCHC40012).

### **PROIECTE DE CERCETARE NATIONALE; DIRECTOR DE PROIECT:**

- “Dezambiguizarea automata a sensului cuvintelor (**DASC**)” in cadrul Programului “IDEP” din PN II (Contract nr. 659 din 15.01.2009) pe o perioada de trei ani (2009-2011); **Director de proiect.**

- **Observatii influentiale si valori aberante in regresia liniara. Criterii de diagnostic** – finantat de Ministerul Cercetarii si Tehnologiei, 2001; **Director de proiect.**

- **Membru a numeroase echipe de cercetare pentru proiecte nationale de cercetare-dezvoltare**

### **REPREZENTARE IN BAZA DE DATE ISI** la 3 secțiuni, și anume:

- Current Contents (R);
- Biosis Previews (R);
- Web of Science.

### **SERVICII ADUSE ORGANIZATIILOR PROFESIONALE:**

- **Referent** pentru articole stiintifice din reviste internationale (Springer, de Gruyter) si **evaluator** a numeroase proiecte internationale de cercetare-dezvoltare in domeniul procesarii limbajului natural (ultima evaluare: 6 proiecte de cercetare ale Lituaniei; mai 2018)

- **Comitetul de organizare si/sau referent** conferinte stiintifice:

- The Summer 4-th International Conference on Knowledge Generation, Communication and Management: KGCM, Orlando, Florida, U.S.A., 2010;
- The ACL-IJCNLP Conference (Association for Computational Linguistics), Singapore, 6-7 august 2009;
- The 3rd International Conference on Knowledge Generation, Communication and Management: KGCM, Orlando, Florida, U.S.A., 2009;
- The 4-th Balkan Conference in Informatics, Thessaloniki, Greece, 17-19 sept. 2009;
- The 2nd International Conference on Knowledge Generation, Communication and Management: KGCM, Orlando, Florida, U.S.A., 2008;
- The 2007 World Congress in Computer Science, Computer Engineering, and Applied Computing - WORLDCOMP '07, 25-28 iulie, 2007, Las Vegas, S.U.A.;
- the ROMAND workshop on Robust Methods in Analysis of Natural Language Data, in conjunction with the EAACL 2006 conference (11-th Conference of the European Chapter of the Association for Computational Linguistics), Trento, Italy, April 3-7, 2006;
- the Student Research Workshop at the EAACL 2006 conference (11-th Conference of the European Chapter of the Association for Computational Linguistics), Trento, Italy, April 3-7, 2006;
- the Language and Speech Infrastructure for Information Access in the Balkan Countries workshop, in conjunction with the international conference RANLP-2005 (“Recent Advances in Natural Language Processing”), Borovets, Bulgaria, September 21-23, 2005;
- ACL/SIGLEX SENSEVAL-3 (“Evaluating Word Sense Disambiguation Systems”), Barcelona, Spain, July 2004;
- Workshop on Balkan Language Resources and Tools, in conjunction with the Balkan Conference on Informatics, November 21, 2003, Thessaloniki, Greece.
- The 7-th Balkan Conference on Informatics, BCI 2015, Craiova, Romania, September 2-4, 2015.

- The 8-th International Global WordNet Conference (GWC 2016), Bucharest, Romania, January 27-30, 2016.
- **Chair** - The 2-nd World Congress on Electrical Engineering and Computer Systems and Science (EECSS '16), Budapest, Hungary, August 16-17, 2016.
- **Chair** - The 1-st Conference on Recent Advances in Artificial Intelligence (RAAI 2017), Bucharest, Romania, June 19-20, 2017.
- The 2-nd Conference on Recent Advances in Artificial Intelligence (RAAI 2018), Bucharest, Romania, June 25-27, 2018.

**PREMIU:** Premiu pentru rezultate deosebite in activitatea de cercetare, acordat de Universitatea din Bucuresti, in anul 2007.

## **PUBLICATII SELECTATE:**

### **I. CARTI:**

1. The Naïve Bayes Model for Unsupervised Word Sense Disambiguation. Aspects Concerning Feature Selection, SpringerBriefs in Statistics Series, Springer, 2012.
2. Aspecte ale reprezentarii cunostintelor cu aplicatii in procesarea limbajului natural. Editura Universitatii din Bucuresti, 2011.
3. Introducere in procesarea limbajului natural. Editura Universitatii din Bucuresti, 2010.
4. Cautarea si reprezentarea cunostintelor in inteligenta artificiala. Teorie si aplicatii (cu M.F. Balcan). Editura Universitatii din Bucuresti, 2005.
5. Introducere in procesarea limbajului natural cu aplicatii in Prolog. Editura Universitatii din Bucuresti, 2000.

### **II. CURSURI SI MANUALE:**

1. Aspecte ale cautarii si reprezentarii cunostintelor in inteligenta artificiala (cu M.F. Balcan). Editura Universitatii din Bucuresti, 2004.
2. Norton Commander 4.0. Norton Utilities 7.0 si 8.0 (cu D. Enachescu si R. Balint). Editura Tehnica, 1994.
3. Sistemul de programe Norton Commander. Editura Tehnica, 1992.

### **III. CAPITOLE IN CARTI; EDITOR:**

1. "On the Semiautomatic Generation of WordNet Type Synsets and Clusters with Special Reference to Romanian", in: Building Awareness in Language Technology (editori Florentina Hristea si Marius Popescu). Editura Universitatii din Bucuresti, p. 113-140, 2003 (in lb. engleza).

2. "A Dependency Grammar Approach to Syntactic Analysis with Special Reference to Romanian" (cu M. Popescu), in: Building Awareness in Language Technology (editori Florentina Hristea si Marius Popescu). Editura Universitatii din Bucuresti, p. 9-34, 2003 (in lb. engleza).

#### IV. INTRARI IN ENCICLOPEDI:

1. **Outlier Detection, Hristea Algorithm.** Encyclopedia of Statistical Sciences, 2<sup>nd</sup> ed., Vol. 9; N. Balakrishnan, Campbell B. Read, and Brani Vidakovic, Editors-in-Chief. John Wiley & Sons, Inc., New York, p. 5885-5886, 2005.
2. **Statistical Natural Language Processing.** International Encyclopedia of Statistical Sciences. Miodrag Lovric, Editor-in-chief. Springer, U.S., Part 19, p.1452-1453, DOI: 10.1007/978-3-642-04898-2\_82, 2011.

#### V. ARTICOLE IN REVISTE CU REFERENTI:

1. Word sense discrimination in information retrieval: A spectral clustering-based approach (cu A. Chifu, J. Mothe, M. Popescu). Information Processing and Management, Vol. 51, Nr. 2, 2015, p. 16-31.
2. Unsupervised Word Sense Disambiguation with N-Gram Features (cu D. Preotiuc). Artificial Intelligence Review, Vol. 41, Nr. 2, 2014, p. 241-260.
3. Feeding Syntactic Versus Semantic Knowledge to a Knowledge-lean Unsupervised Word Sense Disambiguation Algorithm with an Underlying Naïve Bayes Model (cu M. Colhon). Fundamenta Informaticae, Vol. 119, Nr. 1, 2012, p. 61-86.
4. State of the Art Versus Classical Clustering for Unsupervised Word Sense Disambiguation (cu M. Popescu). Artificial Intelligence Review, Vol.35, Nr.3, DOI 10.1007/s10462-010-9193-7, 2011, p. 241-264.
5. Syntactic Relations in the Context of Performing Word Sense Disambiguation (cu M.Colhon). Journal of Knowledge, Communications and Computing Technologies, Vol. II, Nr. 2, 2010, p. 1-9.
6. Performing Word Sense Disambiguation at the Border Between Unsupervised and Knowledge-Based Techniques (cu M. Popescu si M. Dumitrescu). Artificial Intelligence Review, Vol. 30, Nr. 1-4, DOI 10.1007/s10462-009-9117-6, 2009, p. 67-86.
7. Recent Advances Concerning the Usage of the Naïve Bayes Model in Unsupervised Word Sense Disambiguation. International Review on Computers and Software, Vol. 4, Nr. 1, 2009, p. 58-67.
8. Adjective Sense Disambiguation at the Border Between Unsupervised and Knowledge-based Techniques (cu M. Popescu). Fundamenta Informaticae, Vol. 91, Nr. 3-4, 2009, p. 547-562.
9. On the Usage of the Naïve Bayes Model in Unsupervised Word Sense Disambiguation. International Review on Computers and Software, Vol.3, Nr.. 6, 2008, p. 572-578.
10. Semiautomatic Generation of WordNet Type Synsets and Clusters Using Class Methods. An Overview. Revue Roumaine de Linguistique, VOL. LII, Issues 1-2, 2007, p. 97-133.
11. Towards Building a WordNet Noun Ontology (cu G. Miller). Revue Roumaine de Linguistique, VOL. LI, Issues 3-4, 2006, p. 405-413.

12. On Some Romanian Text Summarization Contributions (cu M. Popescu). Revue Roumaine de Linguistique, VOL. LI, Issues 3-4, 2006, p. 507-509.
13. WordNet Nouns: Classes and Instances (cu G. Miller). Computational Linguistics, Vol. 32, Nr. 1, 2006, p. 1-3.
14. On the semiautomatic generation of verb synsets in languages other than English. Annals of the University of Bucharest, ANO LII, 2003, p. 75-86.
15. On the semiautomatic generation of WordNet type synsets and clusters. Journal of Universal Computer Science (J.UCS), Vol.8, nr.12, 2002, p.1047-1064.
16. On the use of MAICE for the detection of outliers in a linear regression model. Mathematical Reports Vol.4 (54), Nr.2, 2002, p. 177-190.
17. On the diagnosis of influential observations in multidimensional linear regression. Mathematical Reports, Nr.4, 1999, p. 545-550.
18. On WG syntactic analysis with special reference to Romanian. Annals of the University of Bucharest, Nr.1, 1998, p. 59-69.
19. A Word Grammar approach to syntactic analysis with special reference to Romanian (cu M. Popescu). Annals of the University of Bucharest , Special Issue, 1998, p. 101-113 .
20. On multiple response outliers of additive nature in a linear regression model. Revue Roumaine de Mathematiques Pures et Appliquees, Nr.3-4, 1998, p. 393-405.
21. An algorithm for the detection of outliers in the case of the normal distribution. Mathematical Reports, Nr.5-6, 1997, p. 339-342.
22. On single distribution outlying pairs in a linear regression model. Annals of the University of Bucharest, XLVI, 1997, p. 27-34.
23. On single carrier outliers in a linear regression model. Foundations of Decision and Computing Sciences, Vol.21, Nr.3, 1996, p. 125-136.
24. On single additive outliers in the linear regression model. Annals of the University of Bucharest, Nr.2, 1996, p. 53-64.
25. On the masking effect concerning some tests for single upper outliers in the case of an exponential sample. Foundations of Decision and Computing Sciences, Vol. 20, Nr.1, 1995, p. 37-48.
26. On the performances of an outlier test in the case of the exponential distribution (cu D. Enachescu si M. Dumitrescu). Computational Statistics and Data Analysis, Nr.17, 1994, p. 119-127.
27. A codification of column-convex polyominoes which generates a regular language. Bulletin of the European Association for Theoretical Computer Science, Nr.50, 1993, p.197-208.
28. On the performances of a test for a single upper outlier in an exponential sample (cu D. Enachescu). Annals of the University of Bucharest, Nr.2, 1992, p. 61-69.
29. On stepwise procedures for the rejection of outliers in a normally distributed population (cu R. Niculescu si D. Enachescu). Annals of the University of Bucharest, Nr.1-2, 1990, p. 14-26.