

## PROFESSOR FLORIAN MIRCEA BOIAN AT HIS SIXTIES

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Professor Florian Mircea Boian graduated the Faculty of Mathematics-Mechanics 32 years ago, i.e. in 1975. He had the opportunity to be a graduate of the first promotion of the newly born section of Computer Science in our Faculty, in that year 1971.

The first year after graduation he worked in a computing center of the Carbochim-Cluj factory, and the following three years as an analyst in our University Computer Center, where he gained huge real experience in programming, and especially in operating systems. Since 1979 he became a member of department, were we are being colleagues for almost thirty years. During these years he stepped through all the didactic positions: assistant, lecturer, associate professor and, since 1997, full professor in Informatics Systems. As a teacher he realised various didactical and extradidactical tasks: admission commissions, license examination commissions, doctoral coordinations, the main promoter of the organisation of our computers network. He is a good colleague and collaborator, has published many scientific papers and books together with some of his colleagues, and has participated to many scientific grants and contracts of our department. He is an active participant at the huge evolution of Computer Science during the last thirty years.

He obtained his PhD degree in 1986, and since 2001 he is a PhD supervisor. He has an important contribution in many fields of Computer Science, and in the education of many generations of Computer scientists. Shortly, we mention:

- didactical activities at 28 disciplines (lectures, seminars, laboratories);
- 12 published books, and 38 university manuals or culegeri de probleme;
- 78 published scientific papers and 82 scientific conference presentations;
- director or member of many research grants, real industrial contracts;
- director of endowment grants, having as main beneficiaries our students and the young faculty members he cooperates with.

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2000 *Mathematics Subject Classification.* 6803.

1998 *CR Categories and Descriptors.* A.0 [**General Literature**]: GENERAL – Biographies/autobiographies.

We must underline the quality of his work in our Department of Computer Science and University:

- His lectures are very appreciated by his students for the their clarity and contents. Consequently, he was elected by many generations as their graduation dean.
- He has introduced some new born disciplines in the Curriculum of the Computer Science Section at our University.
- He is coordinating our well organised network of computers from our laboratories.
- He has participated in many committees and juries of sesions of the students communications or competitions in Computer Science and Computer Engineering, or of school children in olympiads of Computer Science. He was a member of the scientific board of the international Computer Science contest for high school pupils in Central and Eastern Europe, May 1994.
- He is a member of various scientifical organisations: SSM (Romanian Society of Mathematical Sciences) since 1975; ACM (Association of Computing Machinery) since 1995; EUNIS (European Universities Informating Systems) since November 1995; founding member of ANIRO (Romanian National Association of Computer Scientists), since 1999; founding member of RoEduNet Romanian Education Network; member in the Editorial Advisory Board of: "International Journal of Intelligent Computing & Information Science", Ain Shams University, Cairo, Egypt; member in Editorial Board la "Carpathian Journal of Mathematics", Univ. Baia Mare; Executive Editor of the Journal "Studia Universitatis Babes-Bolyai", series Mathematica-Informatica, until 1996, co-president of the "Teaching Center Cluj", since 1998; member in the National Comission RoEduNet of the Romanian Ministry of National Education since 1997; evaluation expert for grants of the Romanian National Research Council of Higer Education, and of the World Bank, since 1996; member in the Editorial Board of "Studia Universitatis Babes-Bolyai", series Informatica.
- During the years 1994-2002 he has been the director of the newly born Communication Center of our University.
- Starting from these years he succeeded to gather many young enthusiastic and talented students, who have succeeded in their future carrier. Many of them received a PhD degree diploma and today are well appreciated teachers, or are working in software companies in Romania or abroad.

We, and all his colleagues do appreciate his hard work and effort to teach our students and for the development of our didactical and scientifical activity in Computer Science. We wish him a happy long life, full of achivements.

## 1. SCIENTIFIC ACTIVITY

### 1.1. Printed books.

- (1) Informatica pentru elevi, ISBN 973-96096-2-7, Editura Microinformatica, Cluj, editiile 1-2 1992, editia 3 1993, (coautor), 212 pagini.
- (2) Programare Pascal; programe ilustrative, probleme propuse pentru elevi si studenti, ISBN 973-96862-1-4, Editura Promedia-Plus, Cluj, 1995, (coautor), 228 pagini.
- (3) Manualul începatorului în programare Pascal, ISBN 973-9215-04-1, Editura Microinformatica, Cluj, 1995, (coautor), 252 pagini.
- (4) Sisteme de operare interactive, ISBN 973-96494-1-6, monografie, Editura LIBRIS, Cluj, 1994, 416 pagini.
- (5) De la aritmetica la calculatoare, ISBN 973-97535-5-8, Editura Presa Universitara Clujeana, Cluj, 1996, 160 pagini.
- (6) Programare distribuită în Internet: metode si aplicatii, ISBN 973-9215-60-2, monografie, Editura Albastra (grupul Microinformatica), editia 1 1998, editia 2 1999, editia 3 2000, 450 pagini.
- (7) Bazele matematice ale calculatoarelor ISBN 973-8095-39-5, Editura Presa Universitara Clujeana, Cluj, 2000, (coordonator, autor în colab.cu Liana Bozga), 154 pagini.
- (8) Programare concurenta pe platforme Unix, Windows, Java ISBN 973-650-072-1, monografie, Editura Albastra - grupul Microinformatica, Cluj, 2002. (coordonator, autor în colab.cu C Ferdean, R. Boian, R. Dragos), 420 pagini.
- (9) Tehnologii fundamentale Java pentru aplicatii Web, ISBN 973-650-131-0, monografie, Editura Albastra - grupul Microinformatica, Cluj, 2004. (în colaborare cu R. Boian), 469 pagini.
- (10) Informatica de baza, ISBN 973-610-340-4, Editura Presa Universitara Clujeana, Cluj, 2004. (în colab.cu M. Frentiu, L. Tânărilea, I. Lazar), 226 pagini.
- (11) Arhitectura calculatoarelor. Limbajul de asamblare 80x86, ISBN 973-651-037-2, Editura RISOPRINT, Cluj, 2005. (în colab.cu A.Vancea, D. Bufnea, A. Gog, A. Darabant, A. Sabau), 400 pagini.
- (12) Sisteme de operare, ISBN 973-751-220-0 978-973-751-220-8, Editura RISOPRINT, Cluj, 2006. (în colab.cu A. Vancea, R. Boian, D. Bufnea, A. Sterca, C. Cobrzan, D. Cojocar), 350 pagini.

### 1.2. Scientific papers.

- (1) Metoda reducerii si marcajelor pentru rezolvarea problemei transporturilor, în Studii si cercetari de calcul economic si cibernetica economica, Bucuresti, 1977, nr. 3, pp. 95-105.
- (2) O metoda de rezolvare a problemei de transport dupa criteriul timp, în Studii si cercetari de calcul economic si cibernetica economica, Bucuresti, 1980, nr. 4, pp. 35-42.
- (3) Pastrarea bibliotecilor de subprograme stiintifice sub sistemul de operare SIRIS, în Lucrarile primului simpozion national de teoria sistemelor, Craiova, 1980, vol II, pp. 260-264.
- (4) Intocmirea orarelor în învătamânt cu ajutorul calculatorului, (în colab.cu I. Boieriu, A. Diaconu s.a.), în Informatica pentru conducere, progrese în informatica romaneasca, 1980, p. 127.
- (5) Determinarea functiilor FIRST1, FOLLOW1 si EFF1 folosind metode booleene, în Lucrarile celui de-al IV-lea colocviu national de informatica, INFO-IASI, 1983, pp. 183-192.
- (6) Automatizarea procesului de luare a deciziilor, (în colab.cu Z. Kasa, D. Oprean, L. Tânărilea), în Supliment la revista economica, nr. 50, 1984, pp. 4-6.
- (7) Syntactic Equivalence between Marked Graph Schemes and Loop-Exit Schemes, în "Babes-Bolyai" University, Faculty of Mathematics, Seminar on Computer Science, Preprint no. 4/1984, pp. 34-56. (MR87h.68008, p. 4489).
- (8) INTADA/k: Subsets of Ada language for Teaching Computer Programming, în Proc. of the First Conference of Program Designers, Eotvos Lorand University, Budapest, 1985 pp. 25-30.
- (9) Programarea calculatoarelor asistata de calculator, în Lucrarile seminarului de cercetari interdisciplinare, Universitatea din Cluj-Napoca, 1985, pp. 17-18.
- (10) Sistemul pentru instruire INTADA; cerinte, definire, implementare, în Lucrarile celui de-al V-lea colocviu national de informatica, INFO-IASI, 1985, vol II, pp. 550-557.
- (11) O metoda eficienta de implementare a deexecutiei, (în colab.cu A. Szekely), în Lucrarile celui de-al V-lea colocviu national de informatica, INFO-IASI, 1985, vol III, pp. 688-692.
- (12) Reducing the Loop-Exit Schemes, în Mathematica, Cluj-Napoca, 28 (51), no. 1, 1986, pp. 1-7. (Zbl. Math. 614.68003, p.363).
- (13) Towards a New Standard FORTRAN, (în colab.cu M. Frentiu, Z. Kasa, L. Tânărilea), în "Babes-Bolyai" University, Faculty of Mathematics, Seminar on Computer Science, Preprint no. 6/1985, pp. 1-20.

- (14) Simularea automatelor programabile, (în colab.cu M. Frentiu, Z. Kasa, L. Tâmbulea, L. Erdo, A. Szen), în Lucrarile simpozionului "Informatica si aplicatiile sale", Zilele academice Clujene, Cluj-Napoca, 1985, pp. 44-51.
- (15) Compilare conversationala bidirectionala cu aplicatii la sistemul INTADA, în Lucrarile simpozionului "Informatica si aplicatiile sale", Zilele academice Clujene, Cluj-Napoca, 1985, pp. 52-58.
- (16) Folosirea corecta a matricelor în programarea modulara, (în colab.cu M. Frentiu), în Lucrarile Seminarului "Didactica matematica", 1986, pp. 86-101.
- (17) Loop-Exit Schemes and Grammars; Properties, Flowchartables, în Studia Univ. "Babes-Bolyai", Mathematica, XXXI, 3, 1986, pp. 52-57. (Zbl. Math. 639.68017, p.353)
- (18) A System for Program Writing and Debuging, (în colab.cu M. Frentiu, Z. Kasa), în "Babes-Bolyai" University, Faculty of Mathematics, Seminar on Computer Science, Preprint no. 5/1987, pp. 1-21.
- (19) Analiza semantica bidirectionala, în Lucrarile celui de-al VI-lea colocviu national de informatica, INFO-IASI, 1987, vol I, pp. 83-88.
- (20) Analiza sintactica bidirectionala, în Lucrarile sesiunii stiintifice a CCUB, Bucuresti, 1987, pp. 145-150.
- (21) Sistem de programe pentru elaborarea statelor de functii, (în colab.cu M. Frentiu, Z. Kasa, L. Tâmbulea), în Lucrarile sesiunii stiintifice a CCUB, Bucuresti, 1987, pp. 438-443.
- (22) FORTRAN can be Improved, (în colab.cu M. Frentiu, Z. Kasa, L. Tâmbulea), în Studia Univ. "Babes-Bolyai", Mathematica, XXXII, 3, 1987, pp. 15-16.
- (23) Reversible Execution with Loop-Exit Schemes, în Studia Univ. "Babes-Bolyai", Mathematica, XXXII, 3, 1987, pp. 29-36. (Zbl. Math. 638.68012, p. 321 si MR 1989, p. 119).
- (24) Parallel Execution in Loop-Exit Schemes, (în colab.cu M. Frentiu, Z. Kasa), în "Babes-Bolyai" University, Faculty of Mathematics, Seminar on Computer Science, Preprint no. 9/1988, pp. 3-16. (Zbl. Math. 668.68023).
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- (26) Folosirea calculatorului personal în predarea geometriei, (în colab.cu M. Frentiu, Z. Kasa), în Lucrarile Seminarului "Didactica matematica", 1987 1988, pp. 39-50.

- (27) Elemente de programare în limbajul BASIC, (în colab.cu M. Frentiu, Z. Kasa), în Lucrarile Seminarului "Didactica matematica", 1987 1988, pp. 51-64.
- (28) Sistem de fisiere bazat pe B-arbori, în Lucrarile celui de-al VII-lea colocviu national de informatica, INFO-IASI, 1989, pp. 33-40.
- (29) Cautare rapida în B-arbori, în Lucrarile simpozionului "Informatica si aplicatiile sale", Zilele academice Clujene, Cluj-Napoca, 1989.
- (30) Parallel Executable Sequences în Serial Programs, (în colab.cu M. Frentiu, Z. Kasa), în Studia Univ. "Babes-Bolyai", Mathematica, XXXIV, 3, 1989, pp. 3-16.
- (31) Computer aided Geometry, (în colab.cu M. Frentiu, Z. Kasa), în "Babes-Bolyai" University, Faculty of Mathematics, Seminar on Computer Science, Preprint no. 9/1989 pp. 11-20.
- (32) Efficiency în parallel evaluation of Arithmetic Expressions, (în colab.cu M. Frentiu, Z. Kasa), în "Babes-Bolyai" University, Faculty of Mathematics, Seminar on Complexity, Preprint no. 10/1989, pp. 1-14. (MR92m:65009, p. 7036 si Zbl. Math. 796.68110 p. 470).
- (33) A Translator for Syntactic Bidirectional Analysis, în Analele Universitatii Bucuresti, Matematica-Informatica, XXXVIII, no. 2, 1989, pp. 14-20. (MR 1991 p. 125 si Zbl. Math. 739.68012 p. 371).
- (34) Extended B-tree, în Studia Univ. "Babes-Bolyai", Mathematica, XXXVII, 3, 1992 pp. 13-20.
- (35) Program testing for LOOP - EXIT Schemes, (în colab.cu M.Frentiu), în Studia Univ. "Babes-Bolyai", Mathematica, XXXVII, 3, 1992 pp. 21-30.
- (36) Doua decenii de informatica universitara Clujeana, în Gazeta de Informatica 11/1992, pp. 7-8.
- (37) An Implementation Scheme for PARBEGIN - PAREN Construction, (în colab.cu A. Vancea), în Studia Univ. "Babes-Bolyai", Mathematica, XXXVIII, 3, 1993, pp. 7-10.
- (38) Bounds in very big arithmetic with very big bases, în "Babes-Bolyai" University, Faculty of Mathematics, Seminar on Computer Science, Preprint no. 4/1993 pp. 79-82 (Zbl. Math. 883.68043 pp. 483-484).
- (39) The UNIX Environment at the "Babes-Bolyai" University, (în colab.cu A. Vancea, H.F. Pop, S. Iurian, M. Iurian), în Proc. of 2-nd International Conference ROSE, Bucuresti, 1994, pp. 145-149.
- (40) Distributed Processing in Extended B-tree, (în colab.cu A. Vancea), în Studia Univ. "Babes-Bolyai", Mathematica, XXXIX, 3, 1994, pp. 25-34 (Zbl. Math. 857.68058 p.474).

- (41) Teaching Parallel and Distributed Computing, (în colab.cu A. Vancea si H.F. Pop), în ROSE'95 Proceedings, Politehnical University Bucuresti, 1995, pp. 66-74.
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- (43) Comunicarea prin e-mail si iesirea în Internet, în lucrările conferinței: Informatizarea învățământului, Balti, Republica Moldova, oct. 1995, pp. 74-77
- (44) An Efficient Topology for the "Babes-Bolyai" computer network: UBB-NET, (în colab.cu C. Ciplea, G. Ciplea, L. Lazar, A. Moldovan), în Studia Univ. Babes-Bolyai, Mathematica, XXXXI, 1996.
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- (47) An Intranet Information System over UBBNET, (în colab.cu L. Lazar). Proceedings EUNIS'98, Prague, Czech Republic, ISBN 80-213-0420-0, 1998, pp. 159-162.
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- (50) On the Exactness of a Data Dependence Analysis Method, (în colab.cu A. Vancea), în Studia Univ. "Babes-Bolyai", Informatica, XLIII, 1, 1998, pp. 13-24.
- (51) Half synchronized transition systems, (în colab.cu C. Ferdean), în Studia Univ. "Babes-Bolyai", Informatica, XLIV, 2, 1999, pp. 77-86.
- (52) Nonsequential Program paradigms with Java Platform Applications, în Advanced Educational Technology Conference Proceedings, ISBN 973-8083-33-4, Cluj-Napoca, 2000. Ed. Petru Maior University, 2000, pp 5-43.

- (53) Improving Distance Education in Computer Science at the Babes-Bolyai University (în colab.cu Z.Kasa si C.Ferdean) în Internet as a Vehicle for Teaching, Romanian Internet Learning Workshop, Miercurea-Ciuc, 11-20 Aug. 2001, pp. 125-129.
- (54) Properties and implementation of the half-synchronized transition systems (în colab.cu C. Ferdean), în "Babes-Bolyai" University, Faculty of Mathematics, Seminar on Computer Science, Preprint, 2000, pp. 65-74.
- (55) New Interaction Mechanisms between Java Distributed Objects, (în colab.cu C. Ferdean), în Studia Univ. "Babes-Bolyai", Informatica, XLV, 1, 2000, pp. 89-100.
- (56) Properties and application framework for half-synchronized transition model, (în colab.cu C. Ferdean), in "International Journal of Computer & Information Sciences", Ain Shams University, Cairo, Egypt.,1, 1, Jul 2001 pp. 58-67.
- (57) Advanced collaboration techniques between Java objects distributed on clusters (în colab.cu C. Ferdean), în "Advanced Environments, Tools, and Applications for Cluster Computing. Lecture Notes in Computer Science 2326, Springer Verlag, (International Workshop on Cluster Computing proceed., NATO Advanced Research Workshop, Mangalia, Romania, 2001), pp. 259-270.
- (58) An Efficiency Comparison of Different Java Technologies, în Studia Univ. "Babes-Bolyai", Informatica, XLVI, 2, 2001, pp. 29-39.
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- (65) Using the RMI with activation technology in distributed applications Proceedings of the symposium "Zilele Academice Clujene" Cluj, 2003, pp. 13-19.
- (66) Active Queue Management for Multimedia Streams (în colab.cu A. Sterca, D. Bufnea, C. Cobârzan) In Proceedings of the Symposium Colocviul Academic Clujean de Informatica, 2004, pp. 117-122.
- (67) Some Analisys of the Bbehavior for TCP Connections sharring a common subpath (în colab.cu D. Bufnea, A. Sterca, C. Cobârzan) în the 4-th International Conference on Applied Mathematics, Baia Mare, 2004, vol 20, no 2, pp. 149-154.
- (68) RMI versus CORBA: A Message Transfer Speed Comparison (în colab.cu R. Boian în Studia Univ. "Babes-Bolyai", Informatica, XLIX, 1, 2004, pp. 83-91.
- (69) Half-synchronized Mechanisms in Distributed Business Applications (în colab.cu R. Boian) "4-th International ROEDUNET Conference, Sovata, aprilie 2005.
- (70) Continuations for remote objects control (în colab.cu E. Todoran, C. Melenti, N. Papaspyrou), în Studia Univ. "Babes-Bolyai", Informatica, L, 1, 2005, pp. 21-37.
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- (72) A Model for Efficient Session Object Management in Web Applications (în colab.cu D. Bufnea, A. Vancea, A. Sterca, D. Cojocar, R. Boian) Proceedings of the Symposium "Colocviul Academic Clujean de Informatica" Cluj, 2006, pp. 131-136.
- (73) Shared Bottleneck Detection from Receiver Point of View (în colab.cu D. Bufnea, A. Vancea) Proceedings of the Symposium "Colocviul Academic Clujean de Informatica" Cluj, 2006, pp. 125-130.
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- (75) Evaluating Dynamic Client-Driven Adaptation Decision Support in Multimedia Proxy-Caches(în colab.cu A. Sterca, D. Bufnea, C. Cobârzan), KEPT 2007 Knowledge Engineering Principles and Techniques, Cluj University Press 2007 ISBN978-973-610-556-2, pp. 298-306.
- (76) Some Formal Approaches for Dynamic Life Session Management (în colab.cu D. Bufnea, A. Vancea, A. Sterca, D. Cojocar, R. Boian), KEPT 2007 Knowledge Engineering Principles and Techniques, Cluj University Press 2007 ISBN978-973-610-556-2, pp. 227-235.

- (77) Distance Learning and Supporting Tools at Babes-Bolyai University  
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- to appear).

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