

# Curriculum Vitae

## I. Personal data

- *Name:* Zoltán Finta
- *Date and place of birth:* March 5, 1964; Odorheiu Secuiesc, Harghita County, Romania
- *Marital status:* Married, 1 child
- *Correspondence address:* Babeş-Bolyai University, Faculty of Mathematics and Computer Science, 1, M. Kogălniceanu st., 400084 Cluj-Napoca, Romania
- *Official e-mail:* fzoltan@math.ubbcluj.ro
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## II. Academic degrees

- 1) *Ph.D.*
  - August 4, 1998 - Babeş-Bolyai University, Faculty of Mathematics and Computer Science, Cluj-Napoca, Romania
  - Title of the thesis: Contribution to the approximation theory of real functions
  - Supervisor: Prof. Dr. Márton Balázs

## III. University education

- 1) September 1983 – June 1987
  - Babeş-Bolyai University, Faculty of Mathematics, Cluj-Napoca, Romania
- 2) September 1992 – July 1997 (Ph.D.)
  - Babeş-Bolyai University, Faculty of Mathematics and Computer Science, Cluj-Napoca, Romania

## IV. Professional background

- 1) September 1987 – February 1991
  - *teacher of mathematics*, Secondary School No. 14 Oradea, Bihor County, Romania

- 2) February 1991 – September 1997  
- *teaching assistant*, Babeş-Bolyai University, Faculty of Mathematics and Computer Science, Cluj-Napoca, Romania
- 3) September 1997 – April 2008  
- *assistant professor*, Babeş-Bolyai University, Faculty of Mathematics and Computer Science, Cluj-Napoca, Romania
- 4) from April 2008  
- *associate professor*, Babeş-Bolyai University, Faculty of Mathematics and Computer Science, Cluj-Napoca, Romania

## **V. Prizes**

- *Scientific excellence diploma* of the Babeş-Bolyai University, awarded by the Babeş-Bolyai University in 2014 for scientific publications

## **VI. Fields of interests**

- approximation theory, numerical analysis, functional analysis

## **VII. Teaching (courses)**

- Mathematical Analysis (II-III)
- Methodical Aspects in Elementary Analysis (I-II)
- Mathematical Analysis (for computer science students)
- General Mathematics / Special Mathematics

## **VIII. Study and research**

- 2001 (1 month)  
Eötvös Loránd University, Budapest, Hungary/Financed by Domus Hungarica Scientiarum et Artium Foundation, Hungary
- 2002 (2 months)  
Eötvös Loránd University, Budapest, Hungary/Financed by Domus Hungarica Scientiarum et Artium Foundation, Hungary
- 2002 (1 month)  
József Attila University, Szeged / CEEPUS Mobility Grant

- March 2003 – September 2003 (7 months)  
Institute of Research Programs of Sapientia Foundation, Cluj-Napoca, Romania
- November 2003 – March 2004 (5 months)  
Institute of Research Programs of Sapientia Foundation, Cluj-Napoca, Romania
- 2004 (1 month)  
Eötvös Loránd University, Budapest, Hungary/Financed by  
Domus Hungarica Scientiarum et Artium Foundation, Hungary
- October 2004 – July 2005 (10 months)  
Institute of Research Programs of Sapientia Foundation, Cluj-Napoca, Romania
- 2005 (1 month)  
Eötvös Loránd University, Budapest, Hungary/Financed by  
Domus Hungarica Scientiarum et Artium Foundation, Hungary

## **IX. Papers in ISI journals**

1. Z. Finta, *Direct and converse results for Stancu operator*, Period. Math. Hungar., 44(1)(2002), 1-6.
2. Z. Finta, *Uniform approximation by means of some piecewise linear functions*, Miskolc Math. Notes, 3(2)(2002), 101-112.
3. Z. Finta, *Direct local and global approximation theorem for Bernstein type operators*, Filomat, 18 (2004), 27-32.
4. Z. Finta, V. Gupta, *Direct and inverse estimates for Phillips operators*, J. Math. Anal. Appl., 303 (2005), 627-642.
5. Z. Finta, *On converse approximation theorems*, J. Math. Anal. Appl., 312 (2005), 159-180.
6. Z. Finta, V. Gupta, R. N. Mohapatra, *A certain family of mixed summation-integral type operators*, Math. Comput. Modelling, 42(1-2)(2005), 181-191.
7. Z. Finta, N.K. Govil, V. Gupta, *Some results on modified Szász-Mirakjan operators*, J. Math. Anal. Appl., 327 (2007), 1284-1296.

8. H. M. Srivastava, Z. Finta, V. Gupta, *Direct results for a certain family of summation-integral type operators*, Appl. Math. Comput., 190 (2007), 449-457.
9. Z. Finta, *Direct and converse results for  $q$ -Bernstein operators*, Proc. Edinb. Math. Soc., 52(2)(2009), 339-349.
10. V. Gupta, Z. Finta, *On certain  $q$ -Durrmeyer type operators*, Appl. Math. Comput., 209 (2009), 415-420.
11. Z. Finta, V. Gupta, *Approximation properties of  $q$ -Baskakov operators*, Cent. European J. Math., 8(1)(2010), 199-211.
12. Z. Finta, *Approximation by  $q$ -parametric operators*, Publ. Math. Debrecen, 78(3-4)(2011), 543-556.
13. Z. Finta, *Approximation by  $q$ -Bernstein type operators*, Czechoslovak Math. J., 61(136)(2011), 329-336.
14. Z. Finta, *Estimates for Bernstein type operators*, Math. Inequal. Appl., 15(1)(2012), 127-135.
15. Z. Finta, *On generalized Voronovskaja theorem for Bernstein polynomials*, Carpathian J. Math., 28(2)(2012), 231-238.
16. Z. Finta, *New properties of King's operators*, Positivity, 17(1)(2013), 101-109.
17. Z. Finta, *Bernstein type operators having 1 and  $x^{\{j\}}$  as fixed points*, Cent. European J. Math., 11(12)(2013), 2257-2261.
18. Z. Finta, *Note on a Korovkin-type theorem*, J. Math. Anal. Appl., 415 (2014), 750-759.
19. Z. Finta, *Generalized Voronovskaja theorem for  $q$ -Bernstein polynomials*, Appl. Math. Comput., 246 (2014), 619-627.
20. P. N. Agrawal, Z. Finta, A. Sathish Kumar, *Bernstein-Schurer-Kantorovich operators based on  $q$ -integers*, Appl. Math. Comput., 256 (2015), 222-231.
21. P. N. Agrawal, Z. Finta, A. Sathish Kumar, *Bivariate  $q$ -Bernstein-Schurer-Kantorovich operators*, Results Math., 67(3)(2015), 365-380.

## **X. Papers in international journals**

1. Z. Finta, *On approximation by modified Kantorovich polynomials*, Math. Balkanica, 13(3-4)(1999), 205-211.

2. Z. Finta, *On the impossibility of approximating convex functions with  $C^2$  ones*, Math. Pannonica, 11(2)(2000), 205-216.
3. Z. Finta, *Local and global approximation by generalized Bernstein polynomials*, East J. Approx., 9(3)(2003), 357-374.
4. Z. Finta, *Direct and converse theorems for integral-type operators*, Demonstratio Math., 36(1)(2003), 137-147.
5. Z. Finta, *Direct and converse theorems for generalized Bernstein-type operators*, Serdica Math. J., 30 (2004), 33-42.
6. Z. Finta, *Direct local and global approximation theorems for some linear positive operators*, Anal. Theory Appl., 20(4)(2004), 307-322.
7. **Archives:** T. Popoviciu, *On the mean-value theorem for continuous functions*, East J. Approx., 10(3)(2004), 379-382 (The English translation of the original article was carried out by Zoltán Finta and Daniela Kacsó).
8. Z. Finta, V. Gupta, *Some direct results for the iterative combinations of the second kind Beta operators*, J. Concrete Appl. Math., 4(2)(2006), 229-240.
9. Z. Finta, *Direct approximation theorems for discrete type operators*, J. Inequal. Pure Appl. Math., 7(5)(2006), Article ID 163 (10 pages).
10. Z. Finta, V. Gupta, *Durrmeyer type generalized Baskakov-Beta operators*, Southeast Asian Bull. Math., 32(6)(2008), 1037-1048.
11. Z. Finta, V. Gupta, *Approximation by  $q$ -Durrmeyer operators*, J. Appl. Math. Comput., 29(1-2)(2009), 401-415.
12. Z. Finta, *Quantitative estimates for the Lupaş  $q$ -analogue of the Bernstein operator*, Demonstratio Math., 44(1)(2011), 123-130.
13. Z. Finta,  *$L_p$ -approximation ( $p \geq 1$ ) by  $q$ -Kantorovich operators*, J. Oper., Volume 2014 (2014), Article ID 958656 (8 pages).
14. Z. Finta, *Korovkin type theorem for sequences of operators depending on a parameter*, Demonstratio Math., 48(3)(2015), 391-403.

## **XI. Papers in Romanian journals included in IDB**

1. Z. Finta, *Best piecewise convex uniform approximation*, Studia Univ. Babeş-Bolyai, Mathematica, 41(2)(1996), 49-52.

2. Z. Finta, *On some properties of a class of functions*, *Mathematica (Cluj)*, 38(61)(1-2)(1996), 53-59.
3. Z. Finta, *Algorithm for the calculus of the convex function of best uniform approximation*, *Studia Univ. Babeş-Bolyai, Mathematica*, 42(3)(1997), 15-21.
4. Z. Finta, *On some properties of Stancu operator*, *Rev. Anal. Numér. Theor. Approx.*, 27(1)(1998), 99-106.
5. Z. Finta, *Pointwise approximation by generalized Szász-Mirakjan operators*, *Studia Univ. Babeş-Bolyai, Mathematica*, 46(4)(2001), 615-67.
6. Z. Finta,  *$L^p$ -approximation ( $p \geq 1$ ) by Stancu-Kantorovich polynomials*, *Rev. Anal. Numér. Theor. Approx.*, 31(2)(2002), 153-162.
7. Z. Finta, *Quantitative estimates for some linear and positive operators*, *Studia Univ. Babeş-Bolyai, Mathematica*, 47(3)(2002), 71-84.
8. Z. Finta, *On approximation properties of Stancu's operators*, *Studia Univ. Babeş-Bolyai, Mathematica*, 47(4)(2002), 47-55.
9. Z. Finta, *Approximation by generalized Brass operators*, *Studia Univ. Babeş-Bolyai, Mathematica*, 49(1)(2004), 23-39.
10. Z. Finta, *Note on the solvability of a system of equations*, *Studia Univ. Babeş-Bolyai, Mathematica*, 49(3)(2004), 35-41.
11. Z. Finta, *On the  $L_p$ -saturation of the Ye-Zhou operator*, *Rev. Anal. Numér. Theor. Approx.*, 34(1)(2005), 55-62.
12. Z. Finta, *Remarks on Voronovskaja theorem for  $q$ -Bernstein operators*, *Studia Univ. Babeş-Bolyai, Mathematica*, 56(2)(2011), 335-339.
13. Z. Finta, *Approximation by limit  $q$ -Bernstein operator*, *Acta Univ. Sapientiae, Mathematica*, 5(1)(2013), 39-46.

## **XII. Papers published in Romanian journals**

1. Z. Finta, *Despre teorema lui Lagrange în cazul funcțiilor convexe*, *Lucrările Seminarului Didactica Matematicii*, 7(1990-1991), 63-72.

2. Z. Finta, *Diferențiabilitatea unor funcții de tip Riemann*, Lucrările Seminarului Didactica Matematicii, 12(1996), 73-78.
3. Z. Finta, *Notă asupra lemei lui Kronecker*, Lucrările Seminarului Didactica Matematicii, 13(1998), 71-84.
4. Z. Finta : *Despre unele proprietăți ale funcțiilor monotone*, Lucrările Seminarului Didactica Matematicii, 14(1998), 145-150.
5. Z. Finta, *The solution of OQ. 62.*, Octagon Mathematical Magazine, 6(2)(1998), 145-146.
6. Z. Finta, *Din nou despre proprietatea lui Darboux*, Lucrările Seminarului Didactica Matematicii, 15(1999), 39-50.
7. Z. Finta, *Despre unele proprietăți ale șirului lui Traian Lalescu*, Lucrările Seminarului Didactica Matematicii, 16(2000), 73-76.
8. Z. Finta, *A Property in Connection with Bernstein Polynomials*, Octagon Mathematical Magazine, 8(1)(2000), 213-215.
9. Z. Finta, *On some problems regarding Traian Lalescu's sequence*, Gazeta Matematică (Seria A), 18(3)(2000), 235-244.
10. Z. Finta : *On some open problems*, Octagon Mathematical Magazine, 8(2)(2000), 516-518.
11. Z. Finta, *On the open question 67*, Octagon Mathematical Magazine, 8(2)(2000), 501-505.
12. Z. Finta, *O nouă demonstrație a teoremei lui Darboux*, Lucrările Seminarului Didactica Matematicii, 17(2001), 183-190.
13. Z. Finta, *Probleme legate de funcții cu variație mărginită*, Lucrările Seminarului Didactica Matematicii, 19(2002), 123-128.
14. Z. Finta, *Probleme în legătură cu proprietatea lui Darboux*, Lucrările Seminarului Didactica Matematicii, 21(2003), 305-309.

### **XIII. Books and chapter book**

1. Z. Finta, *On direct and converse approximation theorems*, in: Topics in Mathematics, Computer Science and Philosophy (Edited by Ștefan Cobzaș), pp. 95-105, Presa Universitară Clujeană, Cluj-Napoca, 2008.
2. Z. Finta, *On Approximation Properties of  $q$ -King operators*, in: Topics in Mathematical Analysis and Applications, Series: Springer

Optimization and Its Applications, Vol. 94 (Editors: Rassias, T. M., Tóth, L.), pp. 343-362, Springer, New York, 2014.

#### **XIV. Textbooks**

1. Finta Zoltán, *Matematikai Analízis I*, Presa Universitară Clujeană (Kolozsvári Egyetemi Kiadó), Kolozsvár, 2007 (ISBN (10) 973-610-509-1, ISBN (13) 978-973-610-509-8)
2. Finta Zoltán, *Matematikai Analízis II*, Presa Universitară Clujeană (Kolozsvári Egyetemi Kiadó), Kolozsvár, 2007 (ISBN 978-973-610-650-7, ISBN 978-973-610-647-7)

#### **XV. Reviewer activity**

- reviewer for Mathematical Database:  
Zentralblatt für Mathematik / Mathematical Reviews
- reviewer for journals:
  1. Abstract and Applied Analysis
  2. Acta Mathematica Universitatis Comenianae
  3. Acta Mathematica Sinica
  4. Acta Mathematica Vietnamica
  5. Afrika Matematika
  6. Analele Universității de Vest din Timișoara
  7. Annali dell'Università di Ferrara
  8. Applied Mathematics and Computation
  9. Applied Mathematics Letters
  10. Asian Bulletin of Mathematics
  11. Carpathian Journal of Mathematics
  12. Czechoslovak Mathematical Journal
  13. Computers and Mathematics with Applications
  14. Creative Mathematics & Informatics
  15. Filomat (Niš)
  16. Frontiers of Mathematics in China
  17. Gazi University Journal of Science
  18. Hacettepe Journal of Mathematics and Statistics
  19. Indian Journal of Mathematics



20. Indian Journal of Pure and Applied Mathematics
21. International Journal of Mathematics and  
Mathematical Science
22. Jean Journal on Approximation
23. Journal of Applied Mathematics and Computing
24. Journal of Classical Analysis
25. Journal of Inequalities and Applications
26. Journal of Mathematical Inequalities
27. Mathematica Slovaca
28. Mathematical and Computer Modelling
29. Mathematical Communications
30. Mathematical Methods in Applied Sciences
31. Mathematical Modelling and Analysis
32. Mathematical Sciences
33. Miskolc Mathematical Notes
34. Nonlinear Analysis, Series A: Theory, Methods &  
Applications
35. Publicationes Mathematicae – Debrecen
36. Rocky Mountain Journal of Mathematics
37. Sarajevo Journal of Mathematics
38. Studia Scientiarum Mathematica Hungarica
39. Studia Universitatis Babeş-Bolyai, Series Mathematica
40. The Journal of Nonlinear Sciences and Applications