

Curriculum Vitae

1. Name, Surname	SUZAN CIVAL BURANAY	
2. Education and scientific degrees	M.S., Ph.D., Assist. Prof. Dr., Assoc. Prof. Dr.	
Institution	Professional qualification, qualification degree, academic degree	Year
Department of Mathematics, Faculty of Arts and Sciences Eastern-Mediterranean University, Famagusta, T.R.N.C.	Ph.D Mathematics (Numerical Analysis)	1995-2007
Department of Mathematics, Faculty of Arts and Sciences Eastern-Mediterranean University, Famagusta, T.R.N.C.	M.S. Applied Mathematics and Computer science	1993-1995
Department of Mathematics, Faculty of Arts and Sciences Eastern-Mediterranean University, Famagusta, T.R.N.C.	B.S. Applied Mathematics and Computer science	1989-1993
3. Place of work		
Institution	Type of sector and occupation	Dates
Department of mathematics, Faculty of Arts and Sciences Eastern-Mediterranean University, Famagusta, T.R.N.C.	Associate Professor Faculty Member	June 2017- Present
Department of mathematics, Faculty of Arts and Sciences Eastern-Mediterranean University, Famagusta, T.R.N.C.	Assistant Professor Faculty Member	Sep. 2013 – June 2017
Department of mathematics, Faculty of Arts and Sciences Eastern-Mediterranean University, Famagusta, T.R.N.C.	Part time instructor	2000 - 2013

Department of mathematics, Faculty of Arts and Sciences Eastern-Mediterranean University, Famagusta, T.R.N.C.	Ph. D Research Assistant	1995-2000
Department of mathematics, Faculty of Arts and Sciences Eastern-Mediterranean University, Famagusta, T.R.N.C.	Ph. D Research Assistant	1993-1994

4. Lectured Courses

4.1. Coordinated Multi Group Courses	Mathematics for Business and Economics – I Calculus – I	
4.2 Master's and PhD Courses	Math 569: Numerical linear Algebra Math 571: Selected Topics in Numerical Analysis Math 669: Advanced Numerical Linear Algebra Math 578: Theory of Finite Difference Schemes	
4.3. Undergraduate Courses		
Elementary Mathematics		
Introductory Mathematics		
Linear Algebra		
Discrete Mathematics		
Ordinary Differential Equations		
Mathematics for Business and Economics – I		
Linear Algebra		
Numerical Analysis for Engineers		
Calculus – I		
Differential Equations		
Introduction to Teaching Profession		
Development and Learning		
Basic Mathematics		
Basic Mathematics – I		
Introduction to Computers		
Basic Mathematics – II		
Calculus – I		
Calculus – II		
Introductory Mathematics		
Computer – I		
Mathematics for Electronic Technician		
Mathematics for Arts and Social Sciences		
Computers for Law		
Analytic Geometry – I		
General Mathematics		
Analysis – III		
Analytic Geometry – II		
Geometry		
Mathematics for Business and Economics – II		
Ordinary Differential Equations and Linear Algebra		

Numerical Analysis for Engineers
Mathematical Methods for Engineers

5. Theses Supervised

5.1 Master's Theses Completed

1. Soran Jalal Abdalla., "Approximate methods of inverse preconditioners for solving the linear algebraic equations", started on September 2013, completed on 2014.
2. Damilola V. Adekanmbi, "On A Comparative Study of Direct Solution Methods of The Discrete Poisson Equation on a Rectangle", started on March, 2015, completed on June, 2016.
3. Bewar Sulaiman, "Accelerated Overrelaxation Method for the Solution of Discrete Laplace's Equation on a Rectangle", started on October 2015, completed on July, 2016.

5.2 Master's Theses In Progress

5.3 Ph.D. Theses in Progress

1. Lawrence Adedayo Farinola, Grid Approximation of Derivatives of the Solution of Heat Conduction Equation, started on 2015-2016 Fall
2. Sara Safarzadeh Falahhesar, Numerical solution of Voltera integral equations using some linear positive operators, started on 2016-2017 Spring
3. Nouman Arshad, Hexagonal Grid Approximation of the Solution of Two Dimensional Heat Equation, Started on 2018-2019 Fall

6. Memberships

- Mathematics Department Seminar Committee member 2013-2014-present ((2018-2019 spring))
- Mathematics Department Social Activities Committee member from 2014-2015 to 2015-2016
- Mathematics Department Graduate Studies Committee member fall 2016-2017 fall to present (2018-2019 spring)

7. Honors and Awards

8. Publications

8.1 INTERNATIONAL ARTICLES

1. Dosiyevev, A.A., Buranay Cival, S. : *A combined method for solving Laplace's boundary value problem with singularities*, Inter. Journal of Pure and Appl. Math., **21**, No. 3, (2005), pp.353—367.

2. Dosiyeu, A.A., Buranay Cival, S. : *On solving the cracked beam problem by a block method*, Communications in Numerical Methods in Engineering, (NOV 2008) ; **24** : pp. 1277-1289.
3. Dosiyeu, A.A., Buranay Cival, S. : *On the order of maximum error of the finite difference solutions of Laplace's equation on rectangles*. ANZIAM J. **50** (JUL 2008), Issue:1, pp. 59-73, DOI: 10.1017/S1446181108000151.
4. Dosiyeu A.A., Buranay Cival S., Subasi D. : *The block-grid method for solving Laplace's equation on polygons with nonanalytic boundary conditions*, Boundary Value Problems (2010), 22 pages, DOI : 10.1155 /2010/468594.
5. Dosiyeu A.A., Mazhar Zeka, Buranay Cival, S. : *Block method for problems on L-shaped domains*, Journal of Computational and Applied Mathematics, Vol. **235** (DEC 2010) pp. 805-816, DOI : 10.1016 /j.cam.2010.07.007.
6. Dosiyeu A.A., Buranay Cival, S., Subasi D.: *The highly accurate block-grid method in solving Laplace's equation for nonanalytic boundary condition with corner singularity*, Computers and Mathematics with Applications, Vol. **64**, pp. 616-632, (AUG 2012) DOI : 10.1016/j.camwa.2011.12.068
7. Dosiyeu A.A., Buranay Cival S.: *A fourth order block-grid method for solving Laplace's equation on a staircase polygon with boundary functions in $C^{k,\lambda}$* , Special Issue "Well-Posed and Ill-Posed Boundary Value Problems for PDE 2013" in Abstract and Applied Analysis, Volume 2013, Article ID : 864865, 11 pages, <http://dx.doi.org/10.1155/2013/864865>.
8. Volkov E. A., Dosiyeu A.A., and Buranay S.C.: *On the solution of a nonlocal problem*, Computers and Mathematics with Applications, Vol. 66 (2013), pp. 330-338. <http://dx.doi.org/10.1016/j.camwa.2013.05.010>
9. Buranay S.C.: *Analysis of the block-grid method for the solution of Laplace's equation on polygons with a slit*, Special Issue "Well-Posed and Ill-Posed Boundary Value Problems for PDE 2013" in Abstract and Applied Analysis Volume 2013, Article ID : 948564, 8 pages, <http://dx.doi.org/10.1155/2013/948564>.
10. Dosiyeu A.A., Buranay Cival S. : *One-block method for computing the generalized stress intensity factors for Laplace's equation on a square with a slit and on L-shaped domain*, Journal of Computational and Applied Mathematics, Vol. **289** (2015), pp. 400-411.
11. Buranay S.C., Subasi D., Iyikal O.C., *On the two classes of high-order convergent methods of approximate inverse preconditioners for solving linear systems*, Numerical Linear Algebra with Applications, Vol 24, 6, (2017), pp.1-28
12. Buranay S.C., Farinola L.A., *Implicit methods for the first derivative of the solution to heat equation*, Advances in Difference Equations, <https://doi.org/10.1186/s13662-018-1887-1>, (2018) 2018:430

8.2 INTERNATIONAL BOOKS

1. Dosiyeu, A.A., Buranay Cival, S.: *A fourth order accurate difference-analytical method for solving Laplace's boundary value problem with singularities*, In "Mathematical Methods in Engineering", Ed. K.Tas, J.A.T. Machado, D. Baleanu, Springer, (2007), pp.167-176.

8.3 INTERNATIONAL CONFERENCE PROCEEDINGS

1. Buranay S.C, Farinola L.A., Six Point Implicit Methods for the Pure Second Derivatives of the Solution of First type Boundary Value Problem for One Dimensional Heat Equation, International Conference on Analysis and Applied Mathematics (ICAAM 2018), AIP Conf. Proc. 1997, 020077-1--020077-6; <https://doi.org/10.1063/1.5049071>.
2. Buranay S.C. Farinola L.A., Four Point Implicit Methods for the Second Derivatives of the Solution of First Type Boundary Value Problem for One Dimensional Heat Equation, Proceedings of the 3rd International Conference on Computational and Engineering Sciences CMES2018, ITM Web of Conferences, **22**, 01011 (2018) CMES-2018, <https://doi.org/10.1051/itmconf/20182201011>.
3. Buranay S.C. Iyikal., O.C., High Order Iterative Methods for Matrix Inversion and Regularized Solution of Fredholm Integral Equation of First Kind with Noisy Data, ITM Web of Conferences **22**, 01002 (2018), CMES-2018, <https://doi.org/10.1051/itmconf/20182201002>
4. Dosiyevev, A.A., Buranay Cival, S. : On solving the cracked beam problem by a block method. 5th GRACM International Congress on Computational Mechanics Limasol, Cyprus, Proceedings., **2**, (2005), pp. 887-893.
5. Dosiyevev, A.A., Cival, S.: A difference-analytical method for solving Laplace's boundary value problems with singularities, In "2004-Dynamical Systems and Applications", Ed. H. Akca, A. Boucherif, and V. Covachev, GBS Publishers & Distributors, India, (2004), pp.339-360.

8.4 INTERNATIONAL CONFERENCE ABSTRACTS

1. Buranay S.C., On the truncation error in the solution of Dirichlet problem for Laplace's equation in plane by finite differences using hexagonal grid, Abstract Booklet of MICOPAM 2018, (2018) page 8.
2. Buranay S.C. Farinola L.A., Four Point Implicit Methods for the Second Derivatives of the Solution of First Type Boundary Value Problem for One Dimensional Heat Equation, 3rd International Conference on Computational and Engineering Sciences Abstract Book page 211, CMES2018, 4-6 May 2018 Girne, Cyprus.
3. Buranay S.C. Iyikal., O.C., High Order Iterative Methods for Matrix Inversion and Regularized Solution of Fredholm Integral Equation of First Kind with Noisy Data, 3rd International Conference on Computational and Engineering Sciences, Abstract Book page 286, CMES2018, 4-6 May 2018 Girne, Cyprus.
4. Buranay S.C, Farinola L.A., Six Point Implicit Methods for the Pure Second Derivatives of the Solution of First type Boundary Value Problem for One Dimensional Heat Equation, Fourth International Conference on Analysis and Applied Mathematics (ICAAM 2018), Abstract Book, Page 44, Cyprus.
5. Dosiyevev A.A., Buranay Cival S. : *One-block method for computing the generalized stress ointensity factors for Laplace`s equation on a square with a slit and on L-shaped domain*, Book of Abstracts for ACOMEN 2014, 23-28 June 2014, Gent, Belgium, pp. 93-94.
6. Dosiyevev, A.A., Buranay Cival, S. : A high accurate difference-analytical method for solving Laplace's equation on polygons with nonanalytic boundary conditions, Abstract of 14th International Congress on Computational and Applied Mathematics (ICCAM2009), Antalya Turkey, 29 September-02 October 2009.

7. DosiyeV, A.A., Mazhar Z., Buranay Cival, S.: Block Method for problems on L-Shaped domains, International Conference on Mathematical Analysis, Differential Equations and their Applications, Book of Abstracts, Famagusta, North Cyprus, September 12-15, 2008.
8. DosiyeV, A.A., Buranay Cival, S. : On solving the cracked beam problem by a block method. Abstract of 5th GRACM International Congress on Computational Mechanics Limasol, Cyprus, 29 June-1 July 2005.
9. DosiyeV, A.A., Cival S. : An effective realization of the high accurate Block-Grid method in solving Laplace's equation on polygons. Book of Abstracts of "International Conference on Mathematical Modelling and Scientific Computing", page 9, April 2-6 2001.
10. DosiyeV, A.A., Cival S., : Domain Decomposition Method for a Nonsmooth Solutions of the Laplace Equation, Tenth International Conference on Domain Decomposition Methods, Conference Program and Book of Abstracts, Boulder, Colorado, USA. August 10-14, (1997).

9. Others

- As faculty representative worked with MIKA for editing graduation year book for 2013-2014 Fall Semester.
- As faculty representative worked with MIKA for international Carrier Week took place on 11-15 May 2015.
- As faculty representative worked with MIKA for international Carrier Week took place on 28 April-1 May 2016.
- As faculty representative worked with MIKA for the 5th international Carrier Week took place on 27 February-3 March 2017.
- As faculty representative worked with MIKA for the 6th international Carrier Week in March 2018.

10. Research Projects

T.C. / KKTC BİLİMSEL ARAŞTIRMA PROJELERİ (BAP-1)

ÜNİVERSİTELERE AİT ARAŞTIRMA PROJESİ (B TÜRÜ ARAŞTIRMA PROJESİ) (2.1.1.02)

Project Start : 1 January 2010

Finish : 1 January 2011

Project Title : Analitik Olmayan Sınır Koşullu Laplace Denklemine Tekilliği Bulunan Çözümleri için Blok-İzgara (Block-Grid) Yöntemi

Director of the project : Prof. Dr. A. A. DosiyeV