

Curriculum Vitae

Personal Information

Surname: Alimohammadi

First Name: Davood

Nationality: Iranian

Gender: Male

States: Married

Date of birth: August 24, 1960

Languages: Persian (mother tongue), English

Contact Information

Department of Mathematics,

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Scientific Position

- Associate Professor, Department of Mathematics, Faculty of Science, Arak University, Arak, Iran, 2014-Present.
- Assistant Professor, Department of Mathematics, Faculty of Science, Arak University, Arak, Iran, 2001-2014.
- Lecturer, Department of Mathematics, Faculty of Science, Arak University, Arak, Iran, 1989-2001.

Education

- Ph.D. in Pure Mathematics - Analysis, Tarbiat Moallem (Kharazmi) University, Tehran, Iran, 2001.
Supervisor: Professor T. Ghasemi Honary
Dissertation: *Peak Sets, Boundaries, Amenability and Weak Amenability for Real and Complex Banach Function Algebras.*
- M.Sc. in Pure Mathematics - Analysis, Tarbiat Moallem (Kharazmi) University, Tehran, Iran, 1988.
Supervisor: Professor T. Ghasemi Honary
Dissertation: *Boundaries and Peak Pints for Banach Function Spaces and Algebras.*
- B.Sc. in Pure Mathematics, Arak University, Arak, Iran, 1982.

Executive position

- Head of Mathematics Department, 2001-2005.
- Vice- Chairman in Research and Education, Faculty of Science, 2005-2009.
- Head of Mathematics Department, 2014-Present.

Research Interests

- Functional Analysis
 - Real and Complex Banach Function Algebras
 - Real and Complex Lipschitz Algebras
 - Compact Homomorphisms between Certain Banach Function Algebras
 - Power Compact and Quasicompact Endomorphisms of Certain Banach Function Algebras
- Complex Analysis
- Harmonic Analysis
 - Amenability and Weak Amenability of Certain Banach Algebras

- Nonlinear Analysis
 - Fixed Point Theory and its Applications
 - Fixed-Point Property of Commutative Banach Algebras

Journal Papers

- **D. Alimohammadi** and A. Ebadian, *Some aspects of real Banach algebras of Lipschitz functions*, Far East J. Math. Sci. 2 (2) (2000), 181-186.
- **D. Alimohammadi**, *Non-weakly amenable subalgebras of $A(K)$ and $D^1(K)$* , Far East J. Math. Sci. 2 (5) (2000), 739-766.
- **D. Alimohammadi** and T. G. Honary, *Contractibility, amenability and weak amenability of real Banach algebras*, The Journal of Analysis 9 (2001), 69-88.
- **D. Alimohammadi** and A. Ebadian, *The Hedberg's theorem in real Lipschitz algebras*, Indian J. Pure and Applied Mathematics 32 (10) (2001), 1479-1493.
- **D. Alimohammadi** and A. Ebadian, *Second dual of real Lipschitz algebras of complex functions*, The Journal of Analysis 11 (2003), 85-103.
- M. Eshaghi Gordji, **D. Alimohammadi** and A. Ebadian, *Some Applications of the generalized Bernardi-Libera-Livingston operator on univalent functions*, Journal of Inequalities in pure and Applied Mathematics 10 (4) (2009), Article 100, 5 pp.
- **D. Alimohammadi** and S. Moradi, *On the fixed-point property of unital uniformly closed subalgebras of $C(X)$* , Fixed point Theory and Applications, Volum 2010, Article ID 268450, 9 pages.
- **D. Alimohammadi**, S. Moradi and E. Analoei, *Unital compact homomorphisms between extended Lipschitz algebras*, Advances and Applications in Mathematical Sciences 10 (3)(2011), 307-330.
- S. Moradi and **D. Alimohammadi**, *New extensions of Kannan fixed-point theorem on complete metric and generalized metric spaces*, Int. J. Math. Anal. 5 (47) (2011), 2313-2320.

- **D. Alimohammadi** and M. Mayghani, *Unital compact homomorphisms between extended analytic Lipschitz algebras*, Abstract and Applied Analysis, Volume 2011, Article ID 146758, 15 pages.

- **D. Alimohammadi** and H. Pazandeh, *Extreme points of the unit ball in the dual space of some real subspaces of Banach spaces of Lipschitz functions*, ISRN Mathematical Analysis, Volume 2012, Article ID 735139, 13 pages.

- **D. Alimohammadi** and S. Moradi, *Some dense linear subspaces of extended little Lipschitz algebras*, ISRN Mathematical Analysis, Volume 2012, Article ID 187952, 10 pages.

- **D. Alimohammadi** and M. Mayghani, *Unital compact homomorphisms between analytic uniform algebras*, The Australian Journal of Mathematical Analysis and Applications, 9(2) (2012), Article 11, pp. 1-9.

- **D. Alimohammadi**, M. Mayghani and M. Izadi, *Compact homomorphisms between certain natural subalgebras of extensions of the disc algebra*, Int. J. Math. Anal. 6 (39) (2012), 1919-1937.

- **D. Alimohammadi** and M. Mayghani, *Unital power compact and quasicompact endomorphisms of extended analytic Lipschitz algebras*, Int. J. Math. Anal. 6 (42) (2012), 2067-2082.

- S. Moradi, T. G. Honary and **D. Alimohammadi**, *On the maximal ideal space of the extended polynomial and rational uniform algebras*, Int. J. Nonlinear Anal. Appl. 3 (2)(2012), 1-12.

- **D. Alimohammadi** and T. G. Honary *Choquet and Shilov Boundaries, Peak Sets and Peak Points for Real Banach Function Algebras*, J. Function Spaces and Applications, Volume 2013, Article ID 519893, 9 pages.

- S. Moradi, E. Analouee Audegani and **D. Alimohammadi**, *Common Fixed Point Theorems for Maps under a New Contractive Condition*, Int. J. Nonlinear Anal. Appl. 4 (2013) No. 2, 15-25.

- **D. Alimohammadi** and H. Pazandeh, *Linear Isometries between Real Banach Algebras of Continuous Complex-Valued Functions*, J. Operators, Volume 2013, Article ID 506129, 9 pages.

- **D. Alimohammadi** and F. Nezamabadi, *Certain Subalgebras of Lipschitz Algebras of Infinitely Differentiable Functions and Their Maximal Ideal Spaces*, Int. J. Nonlinear Anal. Appl. 5(1)(2014), 9-22.
- **D. Alimohammadi** and S. Moradi, *Sufficient Conditions for Density in Extended Lipschitz Algebras*, Caspian J. Math. Sci., 3(1)(2014), 151-161.
- **D. Alimohammadi** and S. Sefidgar, *Compact Composition Operators on Real Banach Spaces of Complex-Valued Bounded Lipschitz Functions*, Journal of Linear and Topological Algebra, 3(2)(2014), 85-101.
- **D. Alimohammadi**, *Nonexpansive Mappings on Complex C^* -Algebras and Their Fixed Points*, Int. J. Nonlinear. Anal. Appl., 7(1)(2016) 21-29.

Conference Papers

- **D. Alimohammadi** and T. G. Honary, *Relation between contractibility, amenability and weak amenability of a real Banach algebra and those of its complexification*, 32th Annual Iranian Mathematics Conference, University of Mazandaran, August 27-30, 2001.
- A. Ebadian and **D. Alimohammadi**, *The Stone-Weierstrass theorem in real Lipschitz algebras*, 32th Annual Iranian Mathematics Conference, University of Mazandaran, August 27-30, 2001.
- **D. Alimohammadi** and T. G. Honary, *Amenability and weak amenability of real Lipschitz algebras and real discrete group algebras of complex functions*, The 12th seminar of Mathematical Analysis and its Applications, Guilan University, February 2-3, 2002.
- **D. Alimohammadi** and A. Ebadian, *The Hedberg's theorem in real Lipschitz algebras of complex functions*, 13th Seminar of Mathematical Analysis and its Applications, Isfahan University, March 16-17, 2003.

- **D. Alimohammadi** and A. Ebadian, *Second dual of real Banach algebra of complex Lipschitz functions*, The 15th seminar of Mathematical Analysis and its Applications, Sistan and Baluchestan University, Mars 9-10, 2005.

- **D. Alimohammadi** and S. Moradi, *Second dual of extended little Lipschitz algebras*, The 18th Seminar of Mathematical Analysis and its Applications, Tarbiat Moallem University, April 15-16, 2009.

- S. Moradi and **D. Alimohammadi**, *Certain dense subspaces of extended little Lipschitz algebras*, The 18th Seminar of Mathematical Analysis and its Applications, Tarbiat Moallem University, April 15-16, 2009.

- **D. Alimohammadi** and T. G. Honary, *Choquet and Shilov boundaries for real subalgebras of $C(X)$* , 40th Annual Iranian Mathematics Conference, Sharif University of Technology, August 17-20, 2009, 346-367.

- **D. Alimohammadi**, M. Mayghani and M. Izadi, *Compact endomorphisms of $Lip_A(\overline{D}, K, \alpha)$* , The 41th International Conference on Mathematics, University of Urmia, September 12-15, 2010, 142-144.

- **D. Alimohammadi** and E. Analoei, *Unital homomorphisms between extended Lipschitz algebras*, The 19th Seminar of Mathematical Analysis and its Applications, University of Mazandaran, February 19-20, 2011.

- **D. Alimohammadi** and F. Nezamabadi, *Properties of certain subalgebras of Lipschitz algebras of infinitely differentiable functions*, University of Mazandaran, February 19-20, 2011.

- **D. Alimohammadi**, M. Mayghani and M. Izadi, *Unital endomorphisms of certain natural uniform subalgebras of extension of the disk algebra*, Sixth International Seminar on Linear Algebras and its Applications, Arak University, June 8-9, 2011, 33-35.

- **D. Alimohammadi** and H. Pazandeh, *Extreme points of the unit ball in the dual space of some real subspaces of spaces of Lipschitz functions*, 42th Annual Iranian Mathematics Conference, Vali-e-Asr University of Rafsanjan, September 5-8, 2012, 259-262.

- **D. Alimohammadi** and M. Mayghani, *Unital compact homomorphisms between extended analytic uniform algebras*, 20th Seminar on Mathematical Analysis and Its Applications, University of Maragheh, July 9-11, 2012, pp 89-42.
- **D. Alimohammadi** and S. Moradi, *Fixed-Point property of complex and real uniform algebras* , The 3th Seminar on Fixed Point Theory and Its Applications, University of Sharekord, Agust 23-24, 2012.
- **D. Alimohammadi** and E. Analoei, *Compact homomorphisms between extended Lipschitz algebras*, 43rd Annual Iranian Mathematics Conference, University of Tabriz, 27-30 August, 2012, 180-182.
- **D. Alimohammadi** and M. Mayghani, *Power Compact and Quasicompact Endomorphisms of Extended Analytic Lipschitz Algebras*,The 44th Annual Iranian Mathematical Conference, Ferdowsi University of Mashhad, August, 27-30, 2013, 170-173.
- **D. Alimohammadi** and H. Pazandeh, *Linear Isometries between Real Banach Algebras of Continuous Complex-valued Functions*,The 7th Seminar of Linear Algebra and its Applications, Ferdowsi University of Mashhad, February, 26-27, 2014, 30-33.
- **D. Alimohammadi** Some Dense Subspaces and Subalgebras of Extended Lipschitz Algebras, The 45th Annual Iranian Mathematics Conference, Semnan University, August, 26-29, 2014,817-820.
- **D. Alimohammadi** Fixed point property of certain subalgebras of $C_0(X)$, The 21th Seminar on Mathematical Analysis and its Applications, 26-27 November 2014, Islamic Azad University, Hamadan, Iran, pp 57-60.

Books • The editor of translation of the text book title ” *Chao for engineers* ”

by : Dr H. Behin

Completed Projects

- **D. Alimohammadi** and S. Moradi, *Second Dual of Extended Little Lipschitz Algebras*, Arak University, 2009-2010.
- **D. Alimohammadi** and S. Moradi, *The Fixed-Point Property of Uniform Algebras*, Arak University, 2010-2011.
- S. Moradi and **D. Alimohammadi**, *The Kannan Fixed-Point Theorem on Complete Metric Spaces and Generalized Metric Spaces Depended an Another Function*, Arak University, 2010-2011.
- **D. Alimohammadi**, S. Moradi and E. Analoei, *Unital compact homomorphisms between extended Lipschitz algebras*, Arak University, 2011-2011.
- **D. Alimohammadi** and S. Moradi, *Sufficient conditions for the density of subalgebras and linear subspaces of extended little Lipschitz algebras*, Arak University, 2012-2013.
- **S. Moradi**, E. Analouee Adegani and D. Alimohammadi, *Common Fixed Point Theorems for Maps under a new Contractive Condition*, Arak University, 2012-2013.

Current Projects

Professional Activities

- Member of the Iranian Mathematical Society
- Scientific Chairman of 17th Seminar on Mathematical Analysis and its Applications, Arak University, 23-24 April 2008.
- Scientific Chairman of 6th International Seminar on Linear Algebra and its Applications, Arak University, 8-9 June 2011.

Thesis supervised

- Thesis Presented for Degree of M.Sc.

1. *Compact endomorphisms of commutative semisimple unital Banach algebras.*
by : Reza Yarahmadi, 2007.
2. *Compact endomorphisms of Lipschitz Algebras and certain subalgebras of the disc algebra.*
by : Saeed Bayati, 2007.
3. *Compact endomorphisms of Lipschitz algebras of analytic functions.*
by : Ahmadrza khosravi, 2008.
4. *Maximal ideal space of Lipschitz algebras of analytic functions.*
by : Sedigheh Beyranvad Borjleh, 2008.
5. *A spectral representation of normal operators on a real Hilbert space.*
by : Somaie Yaghoobi, 2009.
6. *Compact, Riesz and quasicompact endomorphisms of Lipschitz algebras.*
by : Arezoo Beyravand, 2009.
7. *Gleason parts and weakly compact homomorphisms between uniform Banach algebras and compact homomorphisms of URM algebras.*
by : Maryam Izadi, 2009.
8. *Discontinues maps from Lipschitz algebras and disjointness preserving operators between little Lipschitz algebras.*
by : Masoomeh Ghaderi Aghideh, 2009.
9. *Into linear isomorphisms between spaces of Lipschitz functions.*
by : Hadis Pazandeh, 2010.
10. *Order isomorphisms of Lipschitz algebras and algebraic reflexivity of the isometry group of some spaces of Lipschitz functions.*
by : Ebrahim Analoei Audegani, 2010.
11. *On the maximal ideal space of Dales-Davie algebras of infinitely differentiable functions.*
by : Fatemeh Nezamabadi, 2010.
12. *Unital compact and quasicompact homomorphisms between certain subalgebras of Lipschitz algebras.*
by : Maliheh Mayghani, 2010.
13. *Unital compact endomorphisms of Lipschitz algebras of infinitely differentiable functions.*
by : Elham Aghaei, 2011.

14. *Peripherally-multiplicative maps of Lipschitz algebras and weakly Peripherally-multiplicative surjection of pointed Lipschitz algebras.*
by : Narges Saki Dezfuli, 2011.
15. *Compact compositions operators on certain analytic Lipschitz spaces.*
by : Mohammad-Reza Hashemi, 2011.
16. *The fixed-point property of unital commutative Banach algebras.*
by : Hosein Isaabadi, 2012.
17. *Vector-Valued Lipschitz algebras.*
by : Maryam Esfandani, 2012.
18. *Compactness and weak compactness of Gelfand transform in commutative Banach algebras.*
by : Reyhaneh Bagheri, 2012.
19. *Uniform approximations by polynomial rational and analytic functions .*
by : Zahra Shirazi, 2012.
20. *Uniform Algebra Isomorphisms and Peripheral Multiplicativity .*
by : Fereshteh Chitsaz, 2013.
21. *Ransford and Condition Spectrum in Unital Complex Banach Algebras .*
by : Esmat Ahmadloo, 2013.
22. *Complex Composition Operators of Banach Spaces of Lipschitz Bounded Scallar-Valued Functions on Noncompact Metric Spaces .*
by : Sajedeh Sefidgar, 2013.
23. *Projections and Averages of Linear Isometries on Banach Spaces of Scalar-Valued Lipschitz Functions .*
by : Rezvan Barzegari, 2013.
24. *Weighted Composition Operators between Banach Spaces of Vector-Valued Lipschitz Functions. .*
by : Seyyedeh Zahra Hoseini Sharif, 2014.
25. *Norm Condition for Real-Algebra Isomorphisms between Uniform Algebras on Compact Hausdorff Spaces.*
by : Maryam Ahmadi Dermani, 2014.
26. *Real-Linear Isometry Maps between Certain Subspaces of Banach Spaces of Complex-Valued Functions.*
by : Fatemeh Khazaei, 2014.

Teaching

- Teaching in B.Sc.
 - Calculus *I*, Calculus *II*, Calculus *III*, Differential Equations, Engineering Mathematics, Foundations of Mathematics, Set Theory, History of Mathematics, Complex functions, Mathematical Analysis *I*, Mathematical Analysis *II*, Mathematical Analysis *III*, Foundations of Mathematical Analysis, Topology.

- Teaching in M.Sc.
 - Real Analysis, Functional Analysis, Operators Theory.

- Teaching in Ph.D.
 - Banach Algebras, Real Function Algebras.