Curriculum Vitae

Mustafa Avci, PhD

Athabasca University

Applied Mathematics

Faculty of Science & Technology

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Degrees

- PhD Mathematics, Dicle University - 2011
- MSc Mathematics, Dicle University - 2007
- BSc Mathematics, Dicle University - 2001

Professional Experience

- Lecturer (Term), Department of Finance and Management Science, Edwards School of Business, University of Saskatchewan (2021/7 - 2022/6).
- Tutor, Faculty of Science and Technology, Athabasca University (2021-2022/7)
- Tutor, Faculty of Business, Athabasca University (2020-2022/7)
- Mathematics Facilitator (Online), Durham College (2020-2022)
- Assistant Professor (Limited Term), Department of Mathematics, Trent University (2020/8 - 2021/7).
- Instructor (Limited Term), Department of Science and Technology, Northwestern Polytechnic (Grande Prairie Reg Coll.) (2019/8 - 2020/4)
- Instructor (Sessional), Department of Finance and Management Science, Edwards School of Business, University of Saskatchewan (2019/5 - 2019/8).
- Postdoctoral Fellow, Department of Mathematics, Morgan State University (2014/9 - 2015/10).
- Associate Professor, Department of Economics and Administrative Sciences, Batman University (2013/3 - 2018/10).
- Instructor, Economics and Administrative Sciences Programs, Dicle University (2009/1 - 2013/3).

Research

Research Interests

- Analysis of Partial Differential Equations (PDEs)

- Analysis of Stochastic Differential Equations (SDEs)
- Variable Exponent Lebesgue Spaces
- Stochastic Analysis & Applications

Research Specialization Keywords

Variable Exponent Lebesgue Spaces; Variational Methods; PDEs; Topological Methods; Nonlinear Analysis; SDEs; Stochastic Analysis and Applications; Measure-Theoretic Probability.

Research In Progress

- Analysis & Applications of SDEs with state-dependent variable exponent drift and diffusion
- Analysis & Applications of PDEs in variable exponent Lebesgue spaces
- The interplay of probability theory and PDEs

Research Funding (Awards & Grants)

- External Funding Application: Applied for NSERC-Discovery Grants (Individual) Program Nov 2025, in process. Website
- Athabasca University Academic Research Fund-Publication Award (2025)
- Athabasca University Research Incentive Account (Grant No: 140111RIA, 2023-2026)
- International Postdoctoral Research Fellowship Program. Scientific and Technological Research Council of Turkey (TUBITAK) (Grant No: 1059B191400450, 2014-2015). Website
- Dicle University Scientific Project Research Management (DUPAB) Grant (2007 - 2009)
  for the Research Project: The Solutions of Parabolic and Elliptic Equations with Standard and Nonstandard Growth Conditions in the Variable Exponent Lebesgue-Sobolev Spaces.

Refereed Book & Book Chapters

- **Nontrivial weak solutions of a quasilinear equation involving p-Laplace operator** (as Author), in Advances in Mathematics and Computer Science Vol.2, 2019. ISBN 978-93-89562-00-2 (Print) ISBN 978-93-89562-01-9 (eBook). DOI: 10.9734/bpi/amacs/v2. Website
- **A Closer Look at Boundary Value Problems** (as Editor), 2020. Nova Science Publishers, Inc. ISBN: 978-1-53617-857-9. Website

Refereed Conference Proceedings

- **A new solution of some weighted problems for Riemann-Liouville and Weyl operators** (with S. Ograş, R. Mashiyev) (2009), Proceedings

of the 6th International ISAAC Congress, Ankara, Turkey, 13 – 18 August 2007. Website

Refereed Journal Articles

Published/Accepted

1. Nehari manifold approach for a singular multi-phase variable exponent problem.*Quaestiones Mathematicae*

*em>. Accepted **(2025)**. Website.*

- *Existence and multiplicity of solutions for a discrete fourth-order boundary value problem (with M. Boroun, S. Heidarkhani), Journal of Nonlinear Evolution Equations and Applications. Accepted **(2025)**. Website*
- *Anisotropic singular equation with (p(·), q(·))-Laplacian operator and Hardy-type potential. Acta Universitatis Sapientiae Mathematica. Vol. 17, article number 18 **(2025)**. Website*
- *Existence results for the Cox–Ingersoll–Ross model with variable exponent diffusion, AIMS Mathematics 10(9) **(2025)**, 22106–22126. Website*
- *Three Solutions for a double-phase variable-exponent Kirchhoff problem, Mathematics 13(15) **(2025)**, 2462. Website*
- *Singular p(x)-Laplacian equation with application to boundary layer theory, Applicable Analysis 104(13) **(2025)**, 2546–2566. Website*
- *Existence results for a class of singular p(x)–Kirchhoff equations, Complex Variables and Elliptic Equations 70(7) **(2025)**, 1222–1253. Website*
- *On a p(x)-Kirchhoff problem with variable singular and sublinear exponents, Taiwanese Journal of Mathematics 29(2) **(2025)**, 379–402. Website*
- *On a p(x)–Kirchhoff-type equation with singular and superlinear nonlinearities, Differential Equations and Dynamical Systems, **(2024)**. Website*
- *On an anisotropic p(·)-Laplace equation with variable singular and sublinear nonlinearities, Communications in Analysis and Mechanics 16(3) **(2024)**, 554–577. Website*
- *Multiple solutions for a class of p(x)–Kirchhoff-type equations (with S. Heidarkhani, A. Ghobadi), Applied Mathematics E-Notes 22 **(2022)**, 160–168. Website*
- *Solutions of Ginzburg–Landau-type equations involving variable exponent, Thai Journal of Mathematics 20(1) **(2022)**, 369–384. Website*
- *Critical points approaches to a nonlocal elliptic problem driven by p(x)–biharmonic operator (with S. Heidarkhani, S. Moradi), Georgian Mathematical Journal 29(1) **(2021)**, 55–69. Website*
- *A Class of nonlocal elliptic equations in Orlicz–Sobolev spaces (with B. Suer, V. Turut), Journal of Abstract and Computational Mathematics 6(2) **(2021)**, 16–29. Website*
- *On a nonlocal problem with indefinite weights in Orlicz–Sobolev space (with N. T. Chung), Communications of the Korean Mathematical Society 35(2) **(2020)**, 517–532. Website*
- *A variational approach to the existence of infinitely many solutions for difference equations (with M. K. Moghadam, S. Tersian), Journal of New Research in Mathematics 5(22) **(2020)**, 99–110.*

- *A topological result for a class of anisotropic difference equations, Annals of the University of Craiova – Mathematics and Computer Science Series 46(2)* ***(2019)****, 328–343. Website*
- *On some classes of nonlocal problems in Musielak–Sobolev spaces, Southeast Asian Bulletin of Mathematics 43* ***(2019)****, 791–814.*
- *Positive ground state solutions to a nonlocal singular elliptic problem, Canadian Journal of Applied Mathematics 1(1)* ***(2019)****, 1–14. Website*
- *On a nonlocal problem involving a nonstandard nonhomogeneous differential operator (with B. Suer), Journal of Elliptic and Parabolic Equations 5(1)* ***(2019)****, 47–67. Website*
- *On a Robin problem in Orlicz–Sobolev spaces (with K. Suslu), TWMS Journal of Applied and Engineering Mathematics 9(2)* ***(2019)****, 246–256. Website*
- *Solutions to p(x)–Laplace type equations via nonvariational techniques, Opuscula Mathematica 38(3)* ***(2018)****, 291–305. Website*
- *Multivalued elliptic operators with nonstandard growth (with A. Pankov), Advances in Nonlinear Analysis 7(1)* ***(2018)****, 35–48. Website*
- *Existence results to a nonlinear p(k)–Laplacian difference equation (with M. K. Moghadam), Journal of Difference Equations and Applications 23(10)* ***(2017)****, 1652–1669. Website*
- *On a nonlocal Neumann problem in Orlicz–Sobolev spaces, Journal of Nonlinear Functional Analysis 2017* ***(2017)****, Article ID 42, 1–11. Website*
- *Existence results for anisotropic discrete boundary value problems, Electronic Journal of Differential Equations 148* ***(2016)****, 1–11. Website*
- *On a nonlocal problem involving the generalized anisotropic p(·)-Laplace operator, Annals of the University of Craiova – Mathematics and Computer Science Series 43(2)* ***(2016)****, 259–272. Website*
- *Solutions to a system of p(x)–Kirchhoff discrete boundary value problems, Nonlinear Studies 23(4)* ***(2016)****, 665–674. Website*
- *Existence of solutions for nonlocal problems in Sobolev–Orlicz spaces via Monotone method (with R. Mashiyev, N. T. Chung), Electronic Journal of Mathematical Analysis and Applications 4(1)* ***(2016)****, 63–73. Website*
- *Positive periodic solutions of nonlinear differential equations system with nonstandard growth (with R. Ayazoglu), Applied Mathematics Letters 43* ***(2015)****, 5–9. Website*
- *Nontrivial solutions of discrete nonlinear equations with variable exponent (with A. Pankov), Journal of Mathematical Analysis and Applications 431* ***(2015)****, 22–33. Website*
- *Nontrivial weak solutions of a quasilinear equation involving p-Laplace operator, British Journal of Mathematics & Computer Science 6(2)* ***(2015)****, 112–118. Website*
- *Existence of solutions for fourth-order elliptic equations of Kirchhoff type (with F. Wang, Y. An), Journal of Mathematical Analysis and Applications 409(1)* ***(2014)****, 140–146. Website*
- *Existence of three solutions for a quasilinear elliptic equation involving the p(x)–Laplacian (with R. Mashiyev), Sarajevo Journal of Mathematics 10(23)* ***(2014)****, 1–13. Website*
- *Existence and uniqueness of solutions of a nonlocal problem involving the p(x)–Laplacian (with R. Mashiyev), Annals of the University of Craiova – Mathematics and Computer Science Series 41(1)* ***(2014)****, 30–37. Website*
- *Existence results for a nonlocal problem involving the p-Laplacian, Universal Journal of Applied Mathematics 2(3)* ***(2014)****, 153–159. Website*

- *Ni–Serrin type equations arising from capillarity phenomena with non-standard growth, Boundary Value Problems* ***(2013)****, Article 55, 1–18. Website*
- *Existence and multiplicity of solutions for Dirichlet problems involving the p(x)–Laplacian, Electronic Journal of Differential Equations 14* ***(2013)****, 1–9. Website*
- *Existence of solutions for an elliptic equation with nonstandard growth (with R. Mashiyev, B. Cekic), International Journal of Pure and Applied Mathematics 86(1)* ***(2013)****, 131–139. Website*
- *Solutions of a nonlocal elliptic problem involving p(x)–Kirchhoff-type equation, Applied Mathematics 3(2)* ***(2013)****, 56–60. Website*
- *Existence and uniqueness of solutions for a quasilinear elliptic equation involving p-Laplacian (with R. Mashiyev), International Journal of Differential Equations and Applications 12(2)* ***(2013)****, 95–102. Website*
- *Existence results for a nonlocal problem involving the p(x)-Laplacian, Pure and Applied Mathematics Journal 2(1)* ***(2013)****, 20–27. Website*
- *Solutions of nonlocal ($p_1(x)$, $p_2(x)$)-Laplacian equations (with R. Mashiyev), International Journal of Partial Differential Equations, Vol. 2013, Article ID 364251, 7 pages. Website*
- *Existence of weak solutions for a nonlocal problem involving the p(x)–Laplace operator, Universal Journal of Applied Mathematics 1(3)* ***(2013)****, 192–197. Website*
- *Solutions of an anisotropic nonlocal problem involving variable exponent (with R. Mashiyev, B. Cekic), Advances in Nonlinear Analysis 2(3)* ***(2013)****, 325–338. Website*
- *On an elliptic system of p(x)–Kirchhoff-type under Neumann boundary condition (with Z. Yucedag, R. Mashiyev), Mathematical Modelling and Analysis 17(2)* ***(2012)****, 161–170. Website*
- *L^p(x)(\Omega)-estimates of vector fields and applications to magnetostatics problems (with B. Cekic, A. V. Kalinin, R. Mashiyev), Journal of Mathematical Analysis and Applications 389(2)* ***(2012)****, 838–851. Website*
- *Existence and multiplicity of weak solutions for nonuniformly elliptic equations with nonstandard growth (with R. Mashiyev, B. Cekic, Z. Yucedag), Complex Variables and Elliptic Equations 57(5)* ***(2012)****, 579–595. Website*
- *Existence and multiplicity of solutions of the p(x)-Kirchhoff type equation via genus theory (with B. Cekic, R. Mashiyev), Mathematical Methods in the Applied Sciences 34(14)* ***(2011)****, 1751–1759. Website*
- *The Nehari manifold approach for a Dirichlet problem involving the p(x)–Laplacian (with R. Mashiyev, S. Ogras, Z. Yucedag), Journal of the Korean Mathematical Society 47(4)* ***(2010)****, 845–860. Website*
- *Existence of solutions for a class of elliptic systems in $\mathbb{R}^N$ involving the (p(x), q(x))-Laplacian (with S. Ogras, R. Mashiyev, Z. Yucedag), Journal of Inequalities and Applications, Article 612938* ***(2008)****. Website*

Submitted

1. *Stochastic representation of solutions for the parabolic Cauchy problem with variable exponent coefficients. Under review.*
2. *On the geometric Brownian motion with state-dependent variable exponent diffusion term. Under review.*

3. *Monotone operator methods for a class of nonlocal multi-phase variable exponent problems. Under review.*
4. *Existence and uniqueness results for a singular elliptic problem governed by an anisotropic (p(·), q(·))-Kirchhoff-type operator. Under review.*
5. *Variational and nonvariational solutions for double phase variable exponent problems. Under review.*
6. *Anisotropic Variable exponent Kirchhoff-type equation with double singularity (with B. Cekic, Z. Yucedag). Under review.*
7. *Singular Kirchhoff–Ginzburg–Landau-type equation with variable Exponent (with B. Cekic, Z. Yucedag). Under review.*
8. *On a p(x)-Kirchhoff Equation with double singularity exponent (with B. Cekic, Z. Yucedag). Under review.*
9. *Existence results for a class of double phase singular Kirchhoff-type equations with nonstandard growth (with A. Razani). Under review.*

Work in progress

1. *Existence and uniqueness of solutions to SDEs with state-dependent variable exponent.*
2. *On a singular double phase variable exponent problem: A topological result*
3. *Existence results for a double phase variable exponent problem with a singular potential*

Presentations (Invited Talks & Contributed Talks & Workshops)

List

1. ***Existence of solutions for a singular double phase variable exponent problem with (p(.),q(.))- Hardy-type potential**, the Canadian Mathematical Society 80th Anniversary Winter Meeting, December 5-8, 2025, Toronto, Ontario.*
2. ***A viscosity solution approach to the Feynman-Kac formula for a one-dimensional parabolic PDE with variable exponent coefficient**, the Canadian Mathematical Society 80th Anniversary Winter Meeting, December 5-8, 2025, Toronto, Ontario.*
3. ***Online Mathematics Assessment: The Innovative Methods and Challenges of Integrity**, the Canadian Mathematical Society MathEd Meeting (Online), November 28-29, 2025.*
4. ***Recent Trends in Stochastic Partial Differential Equations**, Workshop, November 17-21, 2025, Simons Laufer Mathematical Sciences Institute (SLMath), University of California, Berkeley.*
5. ***SDEs with state-dependent variable exponent drift and diffusion terms**, Analysis Seminar, Oct 29, 2025, Department of Mathematics, University of Alabama, Tuscaloosa.*

6. ***A generalized stochastic volatility model***, *Alberta Mathematics Dialogue, May 1-2, 2025, University of Calgary, Calgary.*
7. ***Enhancing mathematical learning with interactive content and adaptive online assessments*** *(with A. Beltaos, J. Greenwood-Lee), Alberta Mathematics Dialogue, May 1-2, 2025, University of Calgary, Calgary.*
8. ***The regularization method for multivalued elliptic PDEs with variable exponent***, *International Conference on Applied Mathematics, 29–31 October 2020, University of Craiova, Craiova, Romania.*
9. ***Variational approach for analysis of PDEs***, *Mathematics Colloquium, Grande Prairie Regional College, Science Department, February 2020, Grande Prairie.*
10. ***Existence and uniqueness results for a Dirichlet problem in Orlicz–Sobolev spaces***, *International Conference on Mathematics and Mathematics Education (ICMME-2017), 11–13 May 2017, Şanlıurfa, Turkey.*
11. ***Nontrivial solutions for a Dirichlet problem in Orlicz–Sobolev spaces***, *ICMME-2017, 11–13 May 2017, Şanlıurfa, Turkey.*
12. ***Solutions of an anisotropic Kirchhoff problem involving variable exponent***, *ICMME-2017, 11–13 May 2017, Şanlıurfa, Turkey.*
13. ***Solutions of Kirchhoff problem in anisotropic variable exponent spaces***, *ICMME-2017, 11–13 May 2017, Şanlıurfa, Turkey.*
14. ***On some elliptic problems in Orlicz–Sobolev spaces***, *International Health and Natural Sciences Conference (INHSC 2017), 19–21 October 2017, Antalya, Turkey.*
15. ***Solutions to a nonlocal elliptic problem in Orlicz–Sobolev spaces***, *INHSC 2017, 19–21 October 2017, Antalya, Turkey.*
16. ***Solutions of generalized anisotropic problems in variable exponent spaces***, *INHSC 2017, 19–21 October 2017, Antalya, Turkey.*
17. ***A system of anisotropic discrete boundary value problems***, *International Engineering, Science and Education Conference, 1–3 December 2016, Diyarbakır, Turkey.*
18. ***Existence of three solutions to a nonlinear difference equation involving p(k)-Laplace operator***, *International Engineering, Science and Education Conference, 1–3 December 2016, Diyarbakır, Turkey.*
19. ***Variable Lebesgue spaces and variational approach***, *Morgan State University, Department of Mathematics, Mathematics Colloquium, November 2014, Baltimore, U.S.A.*
20. ***Existence and uniqueness of an elliptic equation with p(x)-Laplace operator***, *XXVI. National Mathematics Symposium, 4–7 Sept, 2013, Dicle University, Diyarbakır, Turkey.*
21. ***Power-type weighted Hardy and Hankel operators in variable exponent Morrey space***, *“Operators in General Morrey-Type Spaces and Applications” (Dedicated to the 70th Birthday of Prof. Victor I. Burenkov), Ahi Evran University, Kırşehir, Turkey, 20–27 May 2011.*
22. ***Maximal and Riesz operators in weighted variable exponent Morrey space***, *same event, Ahi Evran University, Kırşehir, Turkey, 20–27 May 2011.*
23. ***Existence of solutions for nonuniformly elliptic equations of p(x)-Laplacian type***, *3rd International Conference on Differential Equations and Applications, Lviv, Ukraine, 3–6 November 2010.*

24. ***Existence of solutions for a p(x)-Laplacian in $\mathbb{R}^N$***, *Workshop on Differential Equations and Applications, Pamukkale University, Denizli, Turkey, 18–20 April 2008.*
25. ***A new solution of some weighted problems for the Riemann–Liouville and Weyl operators***, *6th International ISAAC Congress, 13–18 August 2007, Middle East Technical University (METU), Ankara, Turkey.*

Teaching

AU Teaching and Course Coordination

- *MATH 260 Calculus for Social Sciences and Economics (2022 — present) (Supervising 1 tutor, 1 marker)*
- *MATH 366 Complex Variables I (2022 — present) (Supervising 1 tutor)*
- *MATH 370 Applied Real Analysis (2022 — present) (Supervising 1 tutor)*
- *MATH 376 Ordinary Differential Equations (2025 — present) (Supervising 2 tutors)*
- *MATH 492 Special Study I (2022 — present)*
- *MATH 493 Special Study II (2022 — present)*
- *MATH 495 Mathematics Projects I (2022 — present)*
- *MATH 496 Mathematics Projects II (2022 — present)*
- *MATH 216 Computer-Oriented Approach to Statistics (2022 — 2025) (Supervised 3 tutors)*

AU Tutoring

- *MATH 376 Ordinary Differential Equations (2025 — present)*
- *MATH 216 Computer-Oriented Approach to Statistics (2022—2025)*
- *MATH 365 Multivariable Calculus (2021—2022)*
- *MGSC 301 Statistics for Business and Economics I (2020 — 2022)*
- *MGSC 312 Statistics for Business and Economics II (2020 — 202)*

AU Course Development and Revisions

- *MATH 415 Introduction to Measure and Integration (In Development, 2025 — present)*
- *MATH 426 Introduction to Stochastic Processes (In Development, 2025 — present)*
- *MATH 437 Introduction to Stochastic Calculus (In Development, 2025 — present)*
- *MATH 325 Linear Programming — Developed (In Production) (2024)*

- *MATH 216 Computer-Oriented Approach to Statistics — Revision (2024)*
- *MATH 260 Calculus for Social Sciences and Economics — Revision (2024)*

University of Saskatchewan Courses

- *COMM 121 Business Mathematics (2021/6 — 2022/7)*
- *COMM 207 Business Statistics II (2019/Summer)*
- *COMM 104 Business Statistics I (2019/Sipring)*

Trent University Courses

- *MATH 1005H Applied Calculus (Lecture + Seminar) (2020-21/Fall & Winter & Spring)*
- *MATH 1110H Calculus I (Lecture + Seminar) (2020/Fall)*
- *MATH 2120H Calculus IV (Lecture + Seminar) (2021/Winter)*
- *MATH 4120H Mathematical Modelling I (Lecture + Lab) (2021/Winter)*
- *AMOD 5220H Mathematical Aspects of Modeling (Lecture + Lab) (2021/Spring)*

Durham College Courses

- *MATH 1185 Mathematics for Technology I (2021 — 2022)*
- *MATH 2150 Mathematics for Technology II (2020 — 2021)*

Northwestern Polytechnic Courses

- *ST 1510 Introduction to Applied Statistics I (Lecture + Lab) (2019/Fall & Winter)*
- *ST 2520 Introduction to Applied Statistics II (Lecture + Lab) (2020/ Winter)*
- *MA 1130 Elementary Calculus I (Lecture + Seminar) (2019/Fall)*
- *MA 1600 Higher Arithmetic (Lecture + Seminar) (2020/Winter)*

Morgan State University Courses (USA)

- *MATH 241 Calculus I (2015/Spring)*

Batman University Courses (Turkey) (2013 — 2018)

- *05010303 Business Mathematics*
- *05050407 Statistics*
- *05010105 Calculus I*
- *05010205 Calculus II*
- *05010601 Research Methods and Techniques*
- *02030306 Differential Equations*
- *02030405 Engineering Mathematics*
- *02010405 Applied Mathematics for Engineers*
- *02040401 Applied Mathematics for Engineers: Numerical Methods*
- *02010407 Numerical Analysis*
- *01030301 Advanced Analysis I*
- *01030401 Advanced Analysis II*
- *01030302 Introduction to Topology*
- *01030606 Vector Analysis*
- *01030701 Functional Analysis I*
- *01030809 Functional Analysis II*
- *60070101 Functional Analysis and Applications I*
- *60070111 Functional Analysis and Applications II*
- *60070102 Advanced Real Analysis I*
- *60070112 Advanced Real Analysis II*
- *60070128 Variational Analysis I*
- *60070135 Variational Analysis II*
- *600701100 Specialization Course*
- *600701101 Seminar*
- *61090119 Numerical Methods*
- *61090128 Business Statistics*
- *61090201 Research Methods*

Dicle University (Turkey) (2009 — 2013)

- *Business Mathematics*
- *Business Statistics*
- *Engineering Mathematics*

Supervision

AU Undergraduate Student Supervision

- *Pascale Boudreau - MATH 495 Mathematics Projects I. (2025/1 - 2025/9)*

Project Title: Application of the Fixed-point Theorems to the Solutions of Differential Equations.
- *Amina Anna Mahamane Ousmane - MATH 495 Mathematics Projects I. (2025/5 - 2025/6)*
  Project Title: Investigating the Effectiveness of Optimization Methods : Full-Batch Gradient Descent vs. Stochastic Gradient Descent for Training Regression Models on Housing Market Data.
- *John Didiodato - MATH 493 Special Study II. (2024/1 - 2024/5)*
  Project Title: Mathematical Finance.
- *Andre Leke Umambo - MATH 495 Mathematics Projects I. (2023/7 - 2023/11)*
  Project Title: The Queuing System.
- *Alexander van Dijk - MATH 493 Special Study II. (2022/9 - 2022/12)*
  Project Title: Introduction to Mathematical Finance.
- *Mahin Khan - MATH 492 Special Study I. (2024/7 - 2024/12)*
  Project Title: Measure Theory and Lebesgue Integration.

Theses Supervised

- *Berat Süer - On Solutions of the Ginzburg-Landau-type Equation in Orlicz-Sobolev Spaces, M.Sc. Mathematics (Co-supervisor), Batman University, 2020.*
- *Kenan Süslü - On Solutions of Nonlocal Equations in Orlicz-Sobolev Spaces, M.Sc. Mathematics, Batman University, 2017.*
- *İdris Teymur - Coefficient Bounds for Subclasses of M-Fold Symmetric Bi-Univalent Functions, M.Sc. Mathematics (Co-supervisor), Batman University, 2017.*
- *Diyadin Keskin - Approximation by Simple Functions in L^p Lebesgue Spaces, M.Sc. Mathematics (project-based, non-thesis), Batman University, 2016.*
- *İbrahim Eren Atalay - Convex Functions and Inequalities in L^p Lebesgue Spaces, M.Sc. Mathematics (project-based, non-thesis), Batman University, 2016.*
- *Mehmet Nuri Tüzün, Bounded Linear Operators and Riesz Representation Theorem in L^p Lebesgue Spaces, M.Sc. Mathematics (project-based, non-thesis), Batman University, 2016.*
- *Mustafa Yılmaz, Approximation by Continuous Functions in L^p Lebesgue Spaces, M.Sc. Mathematics (project-based, non-thesis), Batman University, 2016.*

Service & Contributions

AU Standing Committee Memberships

- *FST Faculty Council - (2022 - present)*

- *FST Undergraduate Program Council - (2025 - present)*
- *Academic & Professional Development Fund Committee (APDF) - (2025 - present)*
- *Academic Research Fund Committee (ARF) - (2024 - present)*
- *GFC Academic Planning, Policy, and Standards Committee (APPSC) - (2024 - present)*
- *GFC Academic Research Committee (ARC)- (2024 - present)*
- *APDF - Replacement term - (2023 - 2025)*

AU Ad Hoc Committee/Group Memberships

- *Research Information Management System (RIMS) Advisory Group - (2023 - 2024)*
- *Tri-Agency Undergraduate Student Research Award Selection Committee (USRA) - (2025 - present)*
- *Faculty of Graduate Studies (FGS) Awards Review Committee - (2025 - present)*
- *FGS Faculty Council Working Group: Research Software for Graduate Students and Faculty - (2025 - present)*
- *ARC CFI-JELF Expression of Interest Review Subcommittee (2025)*
- *Applied Math Program Advisory Committee - (2025 - present)*
- *Mobius Ladership Group - (2024 - present)*
- *Hiring Committee service-Assistant Professor - Applied Math.*
- *Hiring Committee service-Tutor - MATH 216*
- *Hiring Committee service-Tutor - MATH 266*
- *Hiring Committee service-Tutor - MATH 309*
- *Hiring Committee service-Tutor - MATH 376*
- *Hiring Committee service-Tutor - MATH 476*
- *Hiring Committee service-Tutor - MATH 480*
- *Hiring Committee service-Tutor - MATH 481*

Professional Activities

Service to Discipline

- *Canadian Mathematical Society, Member (2023/12 - present)*

Editorial Activities

- *Editorial Board Member - Advances in Differential Equations and Control Processes (2025 - present)*
- *Editorial Board Member - Mathematics, Informatics, Physics: Science and Education (2025 - present)*

- *Editorial Board Member - Pure and Applied Mathematics Journal (2025 - present)*
- *Topical Advisory Panel Member - Axioms (2023 - present)*
- *Editorial Board Member - International Journal of Scientific and Innovative Mathematical Research (2018 - present)*
- *Editorial Board Member - American Journal of Applied Mathematics and Statistics (2015 - present)*
- *Editorial Board Member - Journal of Mathematical Sciences and Applications (2015 - present)*
- *Editorial Board Member - International Journal of Partial Differential Equations and Applications (2015 - present)*
- *Editorial Board Member - Universal Journal of Applied Mathematics (2015 - present)*
- *Guest editor for the Special Issue: Advances in Stochastic Differential Equations: Theory, Computation and Applications in Axioms (2025/7 - 2026/12)*
- *Guest editor for the Special Issue: Differential Equations and Stochastic Processes: Trends and Challenges in Mathematics (2023/10 - 2024/11)*
- *Co-Guest editor for the Special Issue: Nonlinear and Variational Analysis and their Applications in Journal of Function Spaces (2020/1 - 2020/12)*

Event Administration

- *Co-organizer - Organized Session: Recent Developments in Stochastic Analysis, PDEs and Related Topics.*
  Alberta Mathematics Dialogue (AMD), University of Calgary, May 1-2, 2025. Website
- *Co-organizer - Organized Session: Innovative Strategies in Online Learning Environments for Mathematics Education.*
  Alberta Mathematics Dialogue (AMD), University of Calgary, May 1-2, 2025.

Conference Commitee Activities

- *Scientific Board Member, 4th International Engineering, Science and Education Conference (INESEC), November 6-8, 2019, Dicle University, Turkey.*
- *Scientific Board Member, 3rd International Engineering and Natural Sciences conference, Nov 14-17, 2018, Dicle University, Turkey.*
- *Scientific Board Member, 2nd International Natural and Health Science Conference (INHSC), October 19-21, 2017, Antalya, Turkey.*
- *Scientific Board Member, 1st International Engineering, Science and Education Conference (INESEC), December 1-3, 2016, Dicle University, Turkey.*
- *Session Chair, 1st International Engineering, Science and Education Conference (INESEC), December 1-3, 2016, Dicle University, Turkey.*

Reviewer for Journals

List

1. *Reviewer for American Mathematical Society/MathSciNet Reviews* [*Website*]
2. *Acta et Commentationes Universitatis Tartuensis de Mathematica*
3. *Acta Mathematica Scienta*
4. *Advances in Nonlinear Analysis*
5. *Afrika Matematika*
6. *AIMS Mathematics*
7. *Annals of the Alexandru Ioan Cuza University – Mathematics*
8. *An International Journal of Optimization and Control: Theories & Applications*
9. *Applicable Analysis*
10. *Applied Mathematics E-Notes*
11. *AppliedMath*
12. *Arabian Journal of Mathematics*
13. *Asian Journal of Mathematics and Computer Research*
14. *Axioms*
15. *Boletim da Sociedade Paranaense de Matemática*
16. *Boundary Value Problems*
17. *Boletín de la Sociedad Matemática Mexicana*
18. *Bulletin of the Malaysian Mathematical Sciences Society*
19. *British Journal of Applied Science and Technology*
20. *Complex Variables and Elliptic Equations*
21. *Computation*
22. *Contemporary Mathematics*
23. *Discrete Dynamics in Nature and Society*
24. *Discrete and Continuous Dynamical Systems, Series S*
25. *Differential Equations and Dynamical Systems*
26. *Electronic Research Archive*
27. *Entropy*
28. *FILOMAT*
29. *Foundations*
30. *Fractal and Fractional*
31. *Georgian Mathematical Journal*
32. *Journal of Mathematics*
33. *Journal of Mathematical Physics*
34. *Journal of Nonlinear Mathematical Physics*
35. *Journal of Advances in Mathematics*
36. *Journal of Advances in Mathematics and Computer Science*
37. *Journal of Inequalities and Applications*
38. *Journal of Nonlinear Functional Analysis*
39. *Journal of Elliptic and Parabolic Equations*
40. *Journal of Pseudo-Differential Operators and Applications*
41. *Kragujevac Journal of Mathematics*
42. *Mathematics*

43. *Mathematical Methods in the Applied Sciences*
44. *Nonlinear Analysis*
45. *Numerical Algorithms*
46. *Proceedings of the Edinburgh Mathematical Society*
47. *Rocky Mountain Journal of Mathematics*
48. *Qualitative Theory of Dynamical Systems*
49. *SIAM Journal on Imaging Sciences*
50. *Symmetry*
51. *TWMS Journal of Applied and Engineering Mathematics*
52. *Zeitschrift für angewandte Mathematik und Mechanik*
53. *Zeitschrift für Analysis und ihre Anwendungen*

Professional Development

Continued Professional Development

- *Higher Education Teaching Certificate–Harvard University, Derek Bok Center for Teaching and Learning, Oct-Dec 2020.*
- *Orientation for Distance Education–The Centre for Professional and Part-time Learning, Durham College, 2020.*
- *Valuing Diversity and Supporting Inclusivity-Virtual Workshop, Trent University, 2020.*
- *How to Deliver Experiential Learning in a Remote Course, Centre for Teaching & Learning, Trent University, 2020.*
- *Developing Your Course Syllabus-The Gwenna Moss Centre for Teaching and Learning, University of Saskatchewan, 2020.*
- *Remote Teaching Essentials: Constructive Alignment in a Remote Context-The Gwenna Moss Centre for Teaching and Learning, University of Saskatchewan, 2020.*
- *Learning How to Increase Learner Engagement-Online Course by LinkedIn Learning, 2020.*
- *Flipping the Classroom-Online Course by Lynda.com, 2020.*
- *Teaching Online: Synchronous Classes-Online Course by Lynda.com, 2020.*
- *How to Engage your Students in a Virtual Environment-webinar by McGraw-Hill, 2020.*
- *Teach Adult Learners in Higher Education-Online Course by Lynda.com, 2020.*
- *Educational Technology for Student Success-Online Course by Lynda.com, 2020.*
- *Communication in the 21st Century Classroom-Online Course by Lynda.com, 2020.*
- *Learning Microsoft Teams for Education-Online Course by Lynda.com, 2020.*
- *Foundations of Learning Management Systems (LMS)-Online Course by Lynda.com, 2020.*
- *Pedagogical Courses (with credit, taken during PhD), Dicle University, Diyarbakir, Turkey, 2011.*

- *The Certificate of Pedagogy Formation for Teachers, Dicle University, Diyarbakir, Turkey, 2001.*

Tech (Research & Education) Skills

- *Teaching in a variety of formats, including face-to-face, online, and hybrid/blended classrooms.*
- *Instructing/Teaching/ Conducting seminars and labs remotely (synchronously and asynchronously).*
- *Working with educational technologies and Learning Management Systems (LMS): Mobius, Blackboard, Canvas, Moodle, Google Classroom, Brightspace.*
- *Competent at: Python, MATLAB, SPSS.*

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