

# *CURRICULUM VITAE*

## *SEDA KARATEKE, Ph.D.*

Date of Birth-Place: 19.02.1985-Bandırma, Balıkesir (Turkey)

Nationality: Republic of Turkey

Istanbul Arel University, Faculty of Faculty of Engineering and Architecture, Department of Computer Engineering and Computer Science, Kemal Gözükara Campus, Türkoba District, Erguvan Street, Number:26, Tepekent - BüyükcçekmeceTR-34537 Istanbul, Turkey.

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### **Present position**

1. Istanbul Arel University, Teaching Member, Faculty of Art and Sciences, Department of Mathematics and Computer Science
2. Istanbul Arel University, Teaching Member, Faculty of Engineering and Architecture, Department of Computer Engineering
3. Erasmus+ Programme Coordinator of the Department of Mathematics and Computer Science, Istanbul Arel University

### **Education and Academic Positions**

<b>Degree</b>	<b>College/Department/Program</b>	<b>University</b>	<b>Year</b>	<b>Degree</b>
Bachelor of Science	Faculty of Arts and Sciences, Department of Mathematics	Bülent Ecevit University	Fall 2003-Spring 2007	Bachelor of Science
Master of Science	Institute of Science, Department of Mathematics, Analysis and The Theory of Functions	Bülent Ecevit University	Fall 2007-Spring 2010	Master of Science
Master of Education	Ereğli College of Education, Pedogogical Proficiency in Mathematics Teaching	Bülent Ecevit University	Fall 2011-Spring 2012	Master of Education
Doctor of Philosophy	Institute of Science, Department of Mathematics, Analysis and The Theory of Functions	Bülent Ecevit University	Fall 2011-Spring 2017	Doctor of Philosophy
Research Assistant	Faculty of Arts and Sciences, Department of Mathematics, Algebra and The Theory of Numbers	Harran University	Spring 2009 - Fall 2011	Research Assistant
Lecturer	Faculty of Arts and Sciences, Department of Mathematics and Computer Science	Istanbul Arel University	Fall 2013-Spring 2017	Lecturer
Lecturer Dr.	Faculty of Arts and Sciences, Department of Mathematics and Computer Science	Istanbul Arel University	Spring 2017-Fall 2018	Lecturer Dr.
Assistant Professor	Faculty of Arts and Sciences, Department of Mathematics and Computer Science	Istanbul Arel University	Fall 2018-continued	Assistant Professor
e-Instructor	Ankara University, Distance Education Center	Ankara University	September 2019-cont.	e-Instructor

### **PhD Dissertation Title, Advisor and Thesis Committee**

*Convergence of the sequences of linear  $k$ -positive operators in the space of entire functions*

Advisor: Prof. Dr. Erdal COŞKUN

Committee Members: Prof. Dr. İbrahim Büyükyazıcı, Prof. Dr. Ertan İBİKLİ, Assistant Prof. Dr. Nazmiye GÖNÜL

### **Master Dissertation Title, Advisor and Thesis Committee**

*Smirnov Spaces and The Eigenvalues of Type of Volterra Integral Operators*

Advisor: Associate Professor Yüksel SOYKAN

Committee Members: Associate Professor İbrahim BÜYÜKYAZICI, Assistant Prof. Dr. Can Murat DİKMEN

**Passed with 'Distinction'** the Master and Doctoral Qualifying Examinations

### **Scholarships & Exam Scores**

2011-2013 : Turkish Republic State PhD Scholarship

**YÖKDİL-English: 88,75**

### **Research & Teaching Assistantship at Harran University**

1. Spring 2009: Teaching Assistant to Professor Dr. Seyit TEMİR
2. Fall 2009: Teaching Assistant to Associate Professor Aydın İZGİ
3. Spring 2010: Teaching Assistant to Assistant Prof. Dr. Yusuf ZEREN
4. Fall 2010: Teaching Assistant to Assistant Prof. Dr. Abdullah YILDIRIM
5. Spring 2009 – Fall 2010: Teaching & Research Assistant to Associate Professor Nayil KILIÇ

*Responsibilities: Weekly practice of lesson (usually 40 students); preparation of midterm and final examination questions (in some classes, the questions were prepared by the professor); preparation sessions for midterms and finals for students; grading (of all exams, papers and calculating final course grades); occasional auditorium lectures*

1. Spring 2009: *Real Analysis*
2. Fall 2009: *Functional Analysis*
3. Spring 2010: *Complex Analysis*
4. Fall 2010: *Analytic Geometry*
5. Spring 2009 – Fall 2010: *Linear Algebra*

Evaluations can be provided upon request.

**Undergraduate Courses Taught in the last 3 years**

Academic Year	University	Name of the Course	Weekly hour	Number of Student
2018-2019 Fall	Istanbul Arel University	Business Mathematics-I for Department of Business Administration	3	6
		Mathematics I for Department of International Trade and Finance	3	21
		Calculus I for Department of Biomedical Engineering	5	16
		Calculus I for Department of Computer Engineering	5	15

		Calculus I for Department of Electrical-Electrical Engineering	5	15
		Linear Algebra for Department of Civil Engineering	3	77

2018-2019 Spring	Istanbul Arel University	Business Mathematics-II for Department of Business Administration	3	11
		Mathematics II for Department of International Trade and Finance	3	12
		Calculus II for Department of Molecular Biology and Genetics	3	23
		Linear Algebra for Department of Computer Engineering	4	9

		Linear Algebra for Department of Biomedical Engineering	4	17
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<b>Summer 2018</b>	Istanbul Arel University	Linear Algebra for Department of Civil Engineering	10	4
		Linear Algebra for Department of Computer Engineering	10	3

<b>2019-2020 Fall</b>	Istanbul Arel University	Business Mathematics-I for Department of Business Administration	3	18
		Mathematics I for Department of International Trade and Finance	3	16
		Calculus I for Department of Computer Engineering	5	49
		Calculus I for Department of Electrical-Electronics Engineering	5	20

		Calculus I for Department of Electrical-Electronics Engineering	5	20
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		Calculus I for Department of Biomedical Engineering	5	23
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		Linear Algebra for Department of Civil Engineering	3	36
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		Linear Algebra for Department of Mechanical Engineering	3	27
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<b>2019-2020 Spring</b>	Istanbul Arel University	Yönetim Bilişim Sistemleri Bölümü için Matematik II	3	2
		Statistics for International Trade and Finance	3	7
		Elektrik Elektronik Mühendisliği için Mathematics II	5	97
		Bilgisayar Mühendisliği için Lineer Cebir	4	50

<b>Summer 2019-2020</b>	Istanbul Arel University	Elektrik Elektronik Mühendisliği için Lineer Cebir ve Uygulamaları	8	2
		Elektrik Elektronik Mühendisliği için Matematik I	8	6

<b>2020-2021 Fall</b>	Istanbul Arel University	Business Mathematics-I for Department of Business Administration	3	24
		Mathematics I for Department of International Trade and Finance	3	24
		Calculus I for Department of Molecular Biology and Genetics	3	35
		Bilgisayar Mühendisliği için Ayrık Matematik	4	20

Elektrik Elektronik Mühendisliği için Ayrık Matematik	4	20
Rektörlük Ortak ders (10 adet Bölüm) Temel Matematik	3	202

<b>2020-2021 Spring</b>	Istanbul Arel University	İnşaat, Makine, Biyomedikal, Bilgisayar ve Elektrik Elektronik Mühendisliği için Lineer Cebir ve Uygulamaları	4	50+
		Statistics for Department of International Trade and Finance	3	14
		Linear Algebra and its applications I for Department of Computer Engineering and Electrics-Electronics Engineering	4	36+
		Statistics for Department of Industrial Engineering	3	11
		Beslenme ve Diyetetik ve Çocuk Gelişimi Bölümleri için Temel Matematik	3	114

<b>2019-2020 Spring</b> <b>MASTER PROGRAMME</b>	Sivas Bilim ve Teknoloji University, Savunma Sanayi Yüksek Lisans Programı	Makine Öğrenmesinin Matematik Temelleri	11	
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## **A. PUBLICATIONS IN REFEREED JOURNALS**

**A1. S. Karateke**, E. Coşkun, 'On convergence properties of sequences of  $k$ -positive operators in the subspace of analytic functions', *European International Journal of Science and Technology* (June **2018**), Vol. 7, No. 4. 21-36. (**Other indexes**).

**A2. S. Karateke**, C. Atakut, İ. Büyükyazıcı, 'Approximation by generalized integral Favard-Szász type operators involving Sheffer polynomials', *FILOMAT*, Vol:33, No:7. (October **2019**) (**SCI-Expanded**).

**A3.** C. Atakut, **S. Karateke**, İ. Büyükyazıcı, 'On approximation process by certain modified Dunkl generalization of Szász-Beta type operators', *Journal of Mathematics and Computer Science* (February **2019**), Vol. 19, Issue:1, 9-18 (**E-SCI**).

**A4.** Ramu Dubey, Vandana, Vishnu Narayan Mishra, **Seda Karateke**, 'A class of second order nondifferentiable symmetric duality relations under generalized assumptions', *Journal of Mathematics and Computer Science*, Vol. 21, Issue:2, 120-126 (April **2020**) (**E-SCI**).

**A5.** Lakshmi Narayan Mishra, Vinita Dewangan, Vishnu Narayan Mishra, **Seda Karateke**, 'Best proximity points of admissible almost generalized weakly contractive mappings with rational expressions on  $b$ -metric spaces', *Journal of Mathematics and Computer Science*, Vol:22, Issue:2, 97-109 (January **2021**) (**E-SCI**).

**A6.** Coskuner, G (Coskuner, Gulnur) ; Jassim, MS (Jassim, Majeed S.); Zontul, M (Zontul, Metin); **Karateke, S (Karateke, Seda)**, 'Application of artificial intelligence neural network modeling to predict the generation of domestic, commercial and construction wastes', *Waste Management & Research*, Pages:0734242X20935181, Publisher: SAGE Publications (**2020**) (**SCI-Expanded**).

**A7.** V. N. Mishra, Ankita R. Devdhara, K. J. Ansari, **S. Karateke**, 'A new kind of modified  $(p;q)$ -Szász-Mirakyan operators', *International Journal of Analysis and Applications* (accepted), (**2021**) (**E-SCI**).

**A8. Seda Karateke**, Metin Zontul, Vishnu Narayan Mishra, and Asha Ram Gairola, 'On the Approximation by Jakimovski-Leviatan-Durrmeyer Operators', *Numerical Functional Analysis and Optimization* (under review), (**SCI-Expanded**).

**A9.** V. N. Mishra, Ankita R. Devdhara, **S. Karateke**, and Metin Zontul, 'Modified Szász-Mirakjan operators fixing exponentials', (submitted). (**E-SCI**).

**A10.** Çiğdem Atakut, Özge Özalp Güller, **Seda Karateke**, 'Some Approximation Results for Bicomplex Bernstein Polynomials', (submitted). (**SCI-Expanded**).

**A11.** İlknur Dönmez, **Seda Karateke**, Metin Zontul, '2D Vector Representation of Binomial Hierarchical Tree Items', (submitted). (**E-SCI**).

**A12.** **Seda Karateke**, Metin Zontul, Nagihan Esendal Bozkurt, and Zafer Aslan, 'A Wavelet-ANFIS Hybrid Model for MODIS NDVI Prediction', *Journal of Applied Remote Sensing (under major revision)*, (**SCI-Expanded**).

## **B. International-National Academic Conferences, Seminars and Workshops**

**B1.** 14<sup>th</sup> Ankara Mathematics Days National Symposium, Gazi University, Ankara, TURKEY (28-29 June 2019)

**B2.** International Conference On Mathematics with Minisymposium on Approximation Theory, Istanbul, TURKEY (July 3-6 2018)

**B3.** IX. Jaén Conference on Approximation Theory, Úbeda (Jaén), SPAIN (July 8-13 2018)

**B4.** 6th International Eurasian Conference on Mathematical Sciences and Applications, Budapest, HUNGARY ( August 15-18 2017)

**B5.** 2nd International Conference On Analysis and Its Applications, Ahi Evran University, Kirsehir, TURKEY (12-15 July 2016)

**B6.** Istanbul Analysis Seminars supported by TUBITAK, Karaköy- İstanbul, Turkey (every week on Friday between December 2013-December 2014)

**B7.** The International Congress in Honour of Professor Ravi Agarwal, Bursa, Turkey (23-26<sup>th</sup> June 2014)

**B8.** ICAAM2012 First International Conference on Analysis and Applied Mathematics, Gumushane University, Gümüşhane, Turkey (18-21<sup>th</sup> October 2012)

**B9.** TUBITAK ` Notification and Education Workshop, Zonguldak, Turkey (21<sup>th</sup> December 2011)

**B10.** XXI. National Mathematics Symposium, Koç University, İstanbul, Turkey (1-4<sup>th</sup> September 2008)

**B11.** IV. International Geometry Symposium, Bülent Ecevit University, Zonguldak, Turkey (17-21<sup>th</sup> July 2006)



### **C. Erasmus+ Bilateral Agreements (organized by S. Karateke)**

**C1.** Erasmus+ Bilateral Agreement with Ovidius University of Constanta, Faculty of Mathematics and Computer Science, ROMANIA, (17.10.2018).

**C2.** Erasmus+ Bilateral Agreement with University of Oradea, Faculty of Mathematics and Computer Science, ROMANIA, (18.10.2018).

**C3.** Erasmus+ Bilateral Agreement with Šiauliai State College, LITHUNIA, (13.06.2019).

**C4.** Erasmus+ Bilateral Agreement with Universidad De Las Palmas De Gran Canaria, Electronics and Automation, Industrial Management Organization, Electricity and Energy, Building and Civil Engineering, Mechanics and Metal Trades, Information and Communication Technologies, Gran Canaria, SPAIN, (08.11.2019).

**C5.** Erasmus+ Bilateral Agreement with St. Cyril and St. Methodius University of Veliko Turnovo, Department of Mathematics and Computer Science, BULGARIA, (03.10.2019).

**C6.** Erasmus+ Bilateral Agreement with American University in Bulgaria, Department of Mathematics and Computer Science, BULGARIA, (03.10.2019).

**C7.** Erasmus+ Bilateral Agreement with Universidad Las Palmas De Gran Canaria, Electronics and Automation, Industrial Management Organization, Electricity and energy, Building and Civil Engineering, Mechanics and Metal Trades, Information and Communication (08.11.2019).

### **D. Erasmus+ Staff Mobility for Teaching**

**D1.** Staff Mobility for Teaching, Universidad de Las Palmas de Gran Canaria, ULPGC, SPAIN (09.03.2020-13.03.2020).

**D2.** Staff Mobility for Teaching, Šiauliai State College, LITHUNIA (23.09.2019 - 27.09.2019)

**D3.** Staff Mobility for Teaching, University of Oradea, ROMANIA (10.12.2019-14.12.2018)

**D4.** Staff Mobility for Teaching (Advanced Geometry, Geometria), University of Verona, ITALY (10.03.2015-11.03.2015)

### **Professional Career and Other Activities:**

Fall 2011- Fall 2013: Private School Offering Specialized Courses, Mathematics and Geometry Teacher

Fall 2003 – (continuing): The TEMA Foundation (Turkish Foundation for Combating Soil Erosion, for Reforestation and the Protection of Natural Habitats) Member

### **Contact:**

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