

ABSTRACT BOOK

ISBN: 978-605-2124-29-1

7th INTERNATIONAL CONFERENCE OF
MATHEMATICAL SCIENCES
ICMS 2023

5-9 JULY 2023

İSTANBUL, TÜRKİYE

Supported by



Edited by

Özkan Değer and Hüseyin Çakallı

CONTENTS

CONTENTS	i
1. FOREWORD	vii
2. COMMITTEES	viii
3. SESSIONS	xi
4. ACKNOWLEDGMENTS	xii
5. PLENARY SPEAKERS	1
Stability of the telegraph type differential equation with time involution <i>Allaberen Ashyralyev, Maral Ashyralyeva, Ogulbabe Batyrova</i>	2
A new double sequence space defined Orlicz function <i>Ekrem Savaş</i>	3
The mixed identity for normed modules <i>Robin Harte</i>	4
6. ABSTRACTS	5
6.1 Topology	6
Neutrosophic AF-open sets <i>Ahu Acikgoz and Ferhat Esenbel</i>	7
A study on some generalizations of δ -separation axioms <i>Ahu Acikgoz and Ferhat Esenbel</i>	8
On a weak form of semi-open function by neutrosophication <i>Ahu Acikgoz and Ferhat Esenbel</i>	9
Quasi-Cauchy Sequences in Asymmetric Metric Spaces <i>Fikriye İnce Dağcı, Hüseyin Çakallı</i>	10
Measure of Noncompactness on Asymmetric Metric Spaces <i>Fikriye İnce Dağcı, Tunç Mısırlıoğlu</i>	11
On the Continuous Linear Maps of Real Locally Convex Spaces <i>Firudin Kh. Muradov</i>	12
Liftings of Local Crossed Modules <i>H. Fulya Akız, Osman Mucuk</i>	13
A strongly type of the neutrosophic continuity <i>Hüseyin Çakallı, Ahu Acikgoz and Ferhat Esenbel</i>	14
On the class of L-weakly compact sets <i>Jawad H'michane</i>	15

Stone Spaces I	16
<i>Mehmet Baran</i>	
Neutrosophication of beta-compactness	17
<i>Osman Mucuk, Ahu Acikgoz and Ferhat Esenbel</i>	
On G-separation axioms for topological groups with operations	18
<i>Osman Mucuk, Hüseyin Çalkallı, Shanza Behram</i>	
On The Disjoint Weak Banach-Saks Operators	19
<i>Othman Aboutafail</i>	
About varieties of G-sequentially methods and G-hulls and G-closures	20
<i>Shanza Behram, Osman Mucuk</i>	
6.2 Analysis and Functional Analysis	21
Existence solutions of stochastic differential equations	22
<i>Abbes Benchaabane</i>	
On the some relations ship between positive and positive p-summing operators	23
<i>Abdelmoumen Tiaïba</i>	
Neumann - Dirichlet - Dirichlet Problem In A Ring Domain	24
<i>Bahriye Karaca</i>	
Approximately order bounded sets in unbounded norm topology	25
<i>Bariş Akay</i>	
A new disjoint hypercyclicity criterion	26
<i>Beyaz Başak Eskişehirli, Özkan Değer</i>	
On the set of addits in time ordered product systems	27
<i>Biljana Vujošević</i>	
Hypercyclic Toeplitz operators on the Hilbert-Hardy space in the unit disc	28
<i>Büşra Kızılırmak, Özkan Değer, Beyaz Başak Eskişehirli</i>	
Embeddings and Regularity of Potentials in Grand Variable Exponent Function Space	29
<i>Dali Makharadze, Alexander Meskhi, Koba Ivanadze</i>	
A Note on Approximation of Nonlinear Baskakov operators Based on q- integers	30
<i>Ecem Acar</i>	
Neutrosophic Statistical Analysis of Humidity of Şanlıurfa City of Turkey	31
<i>Hacer Şengül Kandemir, Nazlım Deniz Aral, Mikail Et</i>	
On Morrey sequence spaces	32
<i>Hendra Gunawan, Denny I. Hakim, and Ifronika</i>	
Some new results on the class of LW-compact operators	33
<i>Khalid Bouras</i>	
Massera problem for some nonautonomous functional differential equations of neutral type with finite delay	34
<i>Mohamed Zitane</i>	
Dynamical Behaviors of p-adic λ-Ising Vannimenus model on the Cayley tree	35
<i>Mutlay Dogan</i>	

Harmonic Summability in Neutrosophic Normed Spaces	36
<i>Nazlım Deniz Aral, Hacer Şengül Kandemir, Mikail Et</i>	
ρ-Strongly Convergence in Neutrosophic Normed Spaces	37
<i>Nazlım Deniz Aral, Hacer Şengül Kandemir, Hüseyin Çakallı</i>	
Singular limit solutions for a 4-dimensional Emden-Fowler system of Liouville type in some general case	38
<i>Nihed Trabelsi and Lilia Larbi</i>	
Some Lipschitz operators between Banach spaces	39
<i>Rachid Yahi</i>	
On Approximation of Truncated Max- Product Baskakov Operators by Fuzzy Numbers	40
<i>Saleem Yaseen Majeed, Sevılay Kırcı Serenbay</i>	
Computing the Regular Trace of the Scalar Sturm-Liouville Equation with Anti-Periodic Boundary Conditions in a Finite Interval	41
<i>Seda Kızılbudak Çalıřkan, Fatma Çeliker</i>	
Majorization inequalities for strongly f-divergences with applications	42
<i>Slavica Ivelić Bradanović</i>	
On bounds of p-valent λ-spirallike functions of order α on the boundary	43
<i>Tugba Akyel, Hande Altınay</i>	
On a functional analysis approach to a class of parabolic equations with logarithmic nonlinearity	44
<i>Uğur Sert</i>	
Asymtotic Formulas for the Sum of Eigenvalues of Higher Order Differential Operator on Banach Space	45
<i>Yonca Sezer, Ozlem Baksi</i>	
6.3 Sequences, Series, Summability	46
On Abel statistical continuity of real functions	47
<i>Iffet Taylan and Huseyin Cakalli</i>	
Some applications of set-valued functions	48
<i>Serkan İlter</i>	
Some remarks about selections of set-valued maps	49
<i>Serkan İlter, Hülya Duru, Seyit Koca</i>	
A variation of continuity in n-normed spaces	50
<i>Sibel Ersan</i>	
Tauberian theorems for statistical Cesàro summability method in intuitionistic fuzzy normed spaces	51
<i>Sinem Karakahya, Zerrin Önder, İbrahim Çanak</i>	
6.4 Fixed Point Theory	52
An inverse time-dependent coefficient problem for a time-fractional diffusion-wave equation with nonlocal boundary conditions	53
<i>Khayra Djerioui, Brahim Nouiri</i>	

Existence and uniqueness of the solutions for a nonlinear time-conformable fractional reaction-diffusion equations with delay	54
<i>Saad Abdelkebir</i>	
6.5 Numerical Functional Analysis	55
Theoretical and numerical studies for p-biharmonic evolution equation	56
<i>Abderrezak Chaoui</i>	
Inverse problem for the beam vibration equation with involution perturbation and their solvability	57
<i>Abdissalam Sarsenbi, Bolat Seilbekov, Asel'han Imanbetova</i>	
On the Behaviors of Solutions in Linear Nonhomogeneous Delay Differential Equations with Periodic Coefficients	58
<i>Ali Fuat Yeniçerioglu and Cüneyt Yazıcı</i>	
On difference schemes for the linear fourth order differential equations	59
<i>Allaberen Ashyralyev, Ibrahim Mohammed Ibrahim</i>	
Direct and inverse problems for a fractional parabolic equation with multiple involution	60
<i>Batirkhan Turmetov, Moldir Muratbekova</i>	
The modified Quasi-Boundary-Value method for an ill-posed generalized elliptic problem	61
<i>Boussetila Nadjib</i>	
Numerical solution of Volterra integro-differential equations by Variationnelle method with the Chebyshev and Legendre polynomial	62
<i>Fernane Khaireddine</i>	
An Efficient Numerical Technique for Non-Linear Hyperbolic Equations Using a Specific Combination of a Cubic B-Spline Collocation Technique and the Higher Order Difference scheme	63
<i>Kelthoum Lina Redouane, Nouria Arar</i>	
Parallel algorithm for solving the inverse problem of identifying the two-dimensional space-dependent right-hand part of the subdiffusion equation	64
<i>Murat A. Sultanov, Vladimir E. Misilov, Yerkebulan Nurlanuly</i>	
On periodic problems for the nonlocal Poisson equation in the circle	65
<i>Moldir Muratbekova, Maira Koshanova, Isabek Orazov</i>	
A criterion for the unique solvability of a multipoint boundary value problem for functional-differential equations with a parameter	66
<i>Usmanov Kairat, Nazarova Kulzina, Turganbaeva Zhannur</i>	
6.6 Computer Science and Technology	67
Prediction Performances of Decision Tree Regression and Support Vector Machines Algorithms on Effluent Chemical Oxygen Demand Concentrations of a Wastewater Treatment Plant	68
<i>Cem Cantekin, Önder Şahinaslan, Nevin Yağcı</i>	
New Ontological Modeling of the Internet of Medical Things for Semantic Search	69
<i>Merzougui Ghalia, Benhazellah Saber</i>	
Investigation of olive plant development with image processing and artificial neural networks	70
<i>Sabri Mumcu, Erdal Güvenoğlu</i>	

Evolution of Software Development Process from Past to Future: An Important Reflection of Digital Transformation	71
<i>Yekta Buğrahan Nizamoglu, Ender Şahinaslan, Önder Şahinaslan</i>	
A Modern Approach to Data Privacy with Federated Learning	72
<i>Ziya Can Kalkavan, Ender Şahinaslan, Önder Şahinaslan</i>	
6.7 Mathematical Methods in Physics	73
Divisorial Decompositions in the Study of the Massless Spectrum in String Theory	74
<i>Aleksander Bosek</i>	
Arbitrary l_{N-1}-state solutions of the screened cosine Kratzer potential via asymptotic iteration approach	75
<i>Aysel Özfidan</i>	
Conditional stability estimate for an ill-posed fourth-order elliptic equation via modified nonlocal conditions	76
<i>Benrabah Abderafik</i>	
Quasi-exactly solvable Dirac equation for the modified double ring-shaped generalized Cornell potential	77
<i>Djahida Bouchefra, Badredine Boudjedaa</i>	
Investigation of the effects of different boundary conditions and material used on the critical buckling load and natural frequency values of the Euler-Type pipe	78
<i>Engin Erbayrak, Fatih Dülgeroğlu</i>	
Vector Bosonic Oscillator in 3D Anti-deSitter Spaces	79
<i>Mustafa Moumni, Mokhtar Falek, Mahmoud Merad</i>	
Theoretical investigation of dispersion properties in photonic slab	80
<i>Nurgül Akıncı</i>	
Blow up of negative-initial-energy solutions for a Biharmonic coupled system with variable exponents	81
<i>Oulia Bouhoufani</i>	
Coneigenvalues and coneigenvectors of quaternion and split quaternion matrices	82
<i>Yasemin Alagöz, Gözde Özyurt</i>	
6.8 Applied Statistics	83
An Alternative Discrete Analogue of the Half-Logistic Distribution	84
<i>Alessandro Barbiero, Asmerilda Hitaj</i>	
6.9 Differential Geometry	85
Translation Surfaces Generated by the Adjoint Curve in 3-dimensional Euclidean Space	86
<i>Burçin Saltık, Nural Yüksel</i>	
On Quasi-Einstein Hypersurfaces in Spaces of Constant Curvature	87
<i>Ryszard Deszcz, Małgorzata Głogowska and Zerrin Şentürk</i>	
On totally geodesic semi-invariant submanifolds of a silver Riemannian manifold	88
<i>Şerife Nur Bozdağ</i>	

6.10 Algebra	89
Algebraic properties of certain Lucas sequences	90
<i>Albulena Bytyqi Beqiri, Gül Karadeniz Gözeri</i>	
Spectral radius and energy of PIS graphs	91
<i>Esra Öztürk Sözen, Elif Eryaşar</i>	
Certain ranks of $SI_{n,r} = I_{n,r} \cup S_n$ and $AI_{n,r} = I_{n,r} \cup A_n$	92
<i>Leyla Bugay</i>	
Generators of certain semigroups of distance-preserving transformations on X_n	93
<i>Leyla Bugay</i>	
On solutions of the equation $x^2 = 0$ in $N(\mathcal{D}_n)$	94
<i>Melek Yağcı</i>	
On strongly r-ideals on commutative rings and some related graphs	95
<i>Khaled Alhazmy, Fuad Ali Ahmed Almahdi, El Mehdi Bouba, Mohammed Tamekkante</i>	
Applications on the Jacobian matrices	96
<i>Zeynep Özkurt</i>	
6.11 Fundamentals of Mathematics and Mathematical Logic	97
Yang-Baxter Equation on Logical Algebras	98
<i>Akin Tarman, Tahsin Oner</i>	
A Note on Radicals in Sheffer Stroke Basic Algebras	99
<i>Begum Ceyhan Tokmakci, Ibrahim Senturk</i>	
Tree-Based Classification Algorithms	100
<i>Buse Kıran, Burak Ordin</i>	
A Mathematical Approach to U-Net Modeling Used in the Detection of Brain Tumors	101
<i>Duygu Isik, Savas Izzetoglu</i>	
On Ensemble Learning Based Methods	102
<i>Elif Hazal Kara Duman, Burak Ordin</i>	
A View on Sheffer Stroke BCK-algebras	103
<i>Gozde Nur Erkafa, Ibrahim Senturk, Tahsin Oner</i>	
Yang-Baxter Equation in Triangle Algebras: Conditions, Operators, and Relationships	104
<i>Ibrahim Senturk, Tahsin Oner</i>	
A Fuzzy Logical Perspective on Economical Decisions	105
<i>Inci Celikors, Ibrahim Senturk</i>	
On Big Data Analysis Methods	106
<i>Kadir Ali Coşkun, Burak Ordin</i>	

1. FOREWORD

On behalf of the Organizing Committee, we are very pleased to welcome you to the 7th International Conference of Mathematical Sciences (ICMS 2023) to be held between 5-9 JULY 2023 via face-to-face and online Conference supported by Maltepe University in Istanbul. We hope that, ICMS 2023 will be one of the most beneficial scientific events, bringing together mathematicians from all over the world, and demonstrating the vital role that mathematics plays in any field of science. Welcome to our conference at Maltepe University.

Hüseyin Çakallı
Chairman of the Organizing Committee

2. COMMITTEES

HONORARY COMMITTEE

Hüseyin Şimşek (Founder of Maltepe University, Chairman of the Board of Trustees, Türkiye)

Edibe Sözen (Rector, Maltepe University, Türkiye)

ORGANIZING COMMITTEE

Huseyin Cakalli, Conference Chairman, Maltepe University, Istanbul, Türkiye

Ozay Gürtug, Maltepe University, Istanbul, Türkiye

Dragan Djordjevic, University of Nis, Faculty of Sciences and Mathematics, Serbia

Ljubisa D.R. Kocinac, University of Nis, Faculty of Sciences and Mathematics, Serbia

Robin Harte, Trinity College, Dublin, Ireland

Mehmet Dik, Rockford University, IL, USA

Ravi P. Agarwal, Texas, USA

Richard F. Patterson, North Florida University, Jacksonville, FL, USA

Pratulananda Das, Jadavpur University, India

Mohammad Kazim Khan, Kent State University, Ohio, USA

Ekrem Savas, Usak University, Türkiye

Naim Braha, University of Prishtina, Kosova

Habib Mazharimousavi, North Cyprus

LOCAL COMMITTEE

Sinan APAK (Maltepe University)

İlkün ORBAK (Maltepe University)

Önder ŞAHİNASLAN (Maltepe University)

Tuğba AKYEL (Maltepe University)

Bahriye KARACA (Maltepe University)

İffet TAYLAN (Maltepe University)

Özay GÜRTUĞ (Maltepe University)

Hüseyin ÇAKALLI (Maltepe University)

Sibel ERSAN (Maltepe University)

İlhan GÜL (Maltepe University)

Filiz CAGATAY UÇGUN (Maltepe University)

Aykut KAYHAN (Maltepe University)

INTERNATIONAL SCIENTIFIC COMMITTEE

A. Duran Türkoğlu (Türkiye)	Hüseyin Bor (Türkiye)
Abdizhahan Sarsenbi (Kazakhstan)	Hüseyin Çakallı (Türkiye)
Adil Güler (Türkiye)	Hüseyin Kaplan (Türkiye)
Ahu Açıkgöz (Türkiye)	I. G. Avramidi (USA)
Alaeddin Malek (Iran)	Ivan Jeliaskovn (USA)
Alexander Abanin (Russia)	İbrahim Çanak (Türkiye)
Allaberen Ashyralyev (Türkiye)	İzzet Sakallı (Türkiye)
Amalia Pielorz (Poland)	J. Diblik (Czech Republic)
Ayşe Sönmez (Türkiye)	J. Gerardo Ahuatzi Reyes (Mexico)
Billy Rhoades (USA)	J.M. Cushing (USA)
Bipan Hazarika (India)	J.Z. Farkas (United Kingdom)
Boyan Dimitrov (USA)	Javier F. Rosenblueth (México)
Charyyar Ashyralyev (Türkiye)	Jean Horgan (Ireland)
David Herrera Carrasco (Mexico)	Jiling Cao (New Zealand)
Dejan Ilic (Serbia)	Kadri Ulaş Akay (Türkiye)
Dragan Djordjevic (Serbia)	K. Fahem (Algeria)
E. Fokoue (USA)	Ljubisa D. R. Kocinac (Serbia)
E. Alexov (USA)	M. Kazim KHAN (USA)
Ekrem Savaş (Türkiye)	M.F. Shaughnessy (USA)
Emin Murat Esin (Türkiye)	Makhmud Sadybekov (Kazakhstan)
Emin Ozcag (Türkiye)	Marcelo Moreira Cavalcanti (Brazil)
Emrah Evren Kara (Türkiye)	Mark Burgin (USA)
Erhan Guzel (Türkiye)	Martin Buntinas (USA)
Evren Hincal (Türkiye)	Matid Matejdes (Slovakia)
Fuat Usta (Türkiye)	Mehmet Dik (USA)
George Anastassiou (USA)	Mikail Et (Türkiye)
H. A. El-Metwally (Egypt)	Murat Esin (Türkiye)
Hacer Şengül Kandemir (Türkiye)	Mustafa Bayram (Türkiye)
H. Elsalloukh (USA)	Müjgan Tez (Türkiye)
H. Nour Eldin (Denmark)	Osman Mucuk (Türkiye)
Hamdullah Şevli (Türkiye)	Ozay Gurtug (Türkiye)
Hamit Topuz (Türkiye)	Öner Çakar (Türkiye)
Hari Mohan Srivastava (Canada)	Özkan Değer (Türkiye)
Hemen Dutta (India)	Pablo Amster (Argentina)
Hongde Hu (USA)	Pratulananda Das (India)

Ravi P. Agarwal, (USA)
Richard Patterson (USA)
Robin Harte (Ireland)
S. Habib Mazharimousavi (North Cyprus)
Sajid Hussain (Canada)
Sibel Ersan (Türkiye)
Şebnem Yıldız (Türkiye)
Tahir Çağın (USA)
Taja Yaying (India)
Tynysbek Kalmenov (Kazakhstan)
Valéria Neves Dominos Cavalcanti (Brazil)
William H. Ruckle (USA)
Xiaoping Shen (USA)
Y. Lio (USA)
Yi Mu (Australia)
Yusuf Ünlü (Türkiye)
Zbigniew Piotrowski (USA)
Zerrin Şentürk (Türkiye)

3. SESSIONS

The lectures in the following parallel sessions are to be held after the plenary speakers lectures.

0. “**Plenary**” organized by Hüseyin Çakallı,
1. “**Topology**” organized by Ljubisa D.R. Kocinac and Osman Mucuk,
2. “**Analysis and Functional Analysis**” organized by Hacer Şengül Kandemir and Nazlım Deniz Aral,
3. “**Sequences, Series, Summability**” organized by İbrahim Çanak and Sefa Anıl Sezer,
4. “**Fixed Point Theory**” organized by Duran Türkoğlu and Hakan Şahin,
5. “**Numerical Functional Analysis**” organized by Allaberen Ashyralyev and Charyyar Ashyralyev,
6. “**Computer Science and Technology**” organized by Şahin Uyaver and Önder Şahinaslan,
7. “**Mathematical Methods in Physics**” organized by Özay Gürtuğ and Filiz Çağatay Uçgun,
8. “**Applied Statistics**” organized by Müjgan Tez and Kadri Ulaş Akay,
9. “**Differential Geometry**” organized by Zerrin Şentürk,
10. “**Algebra**” organized by Leyla Bugay,
11. “**Fundamentals of Mathematics and Mathematical Logic**” organized by Tahsin Öner and İbrahim Şentürk.

4. ACKNOWLEDGMENTS

We thank firstly the founder of Maltepe University, Hüseyin ŞİMŞEK, the rector of Maltepe University, Edibe SÖZEN. We also thank the parallel session organizers, and then all scientific committee members who reviewed abstracts which made the conference better.

There are many people who spent a lot of time and effort to make this conference possible. We would like to thank especially to the following colleagues who had contributed to the success of this conference in various ways:

Özkan Değer, Istanbul University, Istanbul, Türkiye,
Goncagül Balki Yıldız, Maltepe University, Istanbul, Türkiye,
Serdar ANGÜN, Maltepe University, Istanbul, Türkiye,
Fikriye İnce Dağcı, Kültür University, Istanbul, Türkiye

Hüseyin Çakallı
Chairman of the Organizing Committee

Evolution of Software Development Process from Past to Future: An Important Reflection of Digital Transformation

Yekta Buğrahan Nizamoglu, Ender Şahinaslan, Önder Şahinaslan

Maltepe University, Department of Computer Engineering, Istanbul, Turkey, nizamogluyekta@gmail.com
Mudanya University, Department of Computer Engineering, Bursa, Turkey, ender.sahinaslan@mudanya.edu.tr
Maltepe University, Department of Informatics, Istanbul, Turkey, ondersahinaslan@maltepe.edu.tr

Abstract

The software development process has undergone a great evolution from past to present. There is a rapid change from traditional software development methods to modern and innovative approaches. This change is an important reflection of digital transformation along with technological developments. Today, developments in many areas such as artificial intelligence, machine learning, automatic code generation, smart test automation, low code development lead the change in the software development process. In the future, it is predicted that the software development process will evolve into faster, more reliable, flexible and innovative methods with the impact of advanced technologies. This will affect all environments that produce, operate and use the software and will cause radical changes in usage. In this study, the change and current situation of the software development process from past to present will be discussed. Predictions will be shared on how and in what way digital transformation and technological advances may affect the process in the future.

Keywords: Software Development Process Evolution, Digital Transformation, Technology and Innovation

2020 Mathematics Subject Classification Numbers: 68-04, 68U35, 68P30, 97P50

References

- [1] Thomas, D., & Hunt, A. (2019). *The pragmatic programmer*. Addison-Wesley Professional.
- [2] Martin, R. C. (2003). *Agile software development: principles, patterns, and practices*. Prentice Hall PTR
- [3] Sharifi, H., & Zhang, Z. (1999). A methodology for achieving agility in manufacturing organisations: An introduction. *International journal of production economics*, 62(1-2), 7-22.
- [4] Sharma, S., Sarkar, D., & Gupta, D. (2012). Agile processes and methodologies: A conceptual study. *International journal on computer science and Engineering*, 4(5), 892.
- [5] Alami, A., & Paasivaara, M. (2021). How do agile practitioners interpret and foster “technical excellence”? In *Evaluation and assessment in software engineering* (pp. 10-19).
- [6] Sahinaslan, E., Sahinaslan, O., Sabancioglu, M. (2021). Low-code application platform in meeting increasing software demands quickly: SetXRM, AIP Conference Proceedings 2334, 070007. <https://doi.org/10.1063/5.0042213>
- [7] Sahinaslan, E., Sahinaslan, O., Dijital Dönüşümde Öncelikli Alanlar ve İlgili Teknolojiler, Proceedings of the International Congress on Business and Marketing, 13-14.06.2019, ISBN 978-605-2124-27-7, Istanbul, Turkey (in Turkish).
- [8] Sabancioglu, M., Sahinaslan, O., Sahinaslan, E., New Generation Low Code Development Platform to Meet Increasing Software Demands: SetXRM, International Conference of Mathematical Sciences (ICMS 2020), 17-21 June, 2020, ISBN 978-605-2124-32-1, Maltepe University, Istanbul, Turkey
- [9] Sahinaslan, E., “Endüstri 4.0 Dönüşümünde Öne Çıkan Teknolojiler” (Kitap Bölümü), Hayaloğlu, A. & Günday, A. (Ed), Mühendislik Alanında Akademik Çalışmalar, Gece Kitaplığı, ISBN: 978-625-7938-96-9, Ankara, 2020, s.235-252 (in Turkish).
- [10] Kim, G., Humble, J., Debois, P., Willis, J., & Forsgren, N. (2021). *The DevOps handbook: How to create world-class agility, reliability, & security in technology organizations*. IT Revolution.
- [11] Karamitsos, I., Albarhami, S., & Apostolopoulos, C. (2020). Applying DevOps practices of continuous automation for machine learning. *Information*, 11(7), 363.
- [12] Lawal, A., & Ogbu, R. C. (2021). A comparative analysis of agile and waterfall software development methodologies. *Bakolori Journal of General Studies*, 11(2), 1-2.