

Duygu ÜÇÜNCÜ  
Bahcesehir University,  
Engineering and Natural Science Faculty  
Mathematics Department  
Istanbul, Turkey  
duygu.ucuncu@eng.bau.edu.tr



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## EDUCATION

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- PhD. Candidate** **2020 (Expected)**  
Yildiz Technical University, Istanbul  
Mathematics  
Thesis: Makine Öğrenme Problemlerinde İçbükey Olmayan Optimizasyon Modellerinin İki İçbükey Fonksiyonun Farkı ve İkinci Derecede Konik Programlama ile Modellenmesi  
Supervisors: Erdal GÜL, Süreyya ÖZÖĞÜR AKYÜZ
- Master's degree (without Thesis)** **2010**  
Marmara University, Istanbul  
Mathematics and Science Education / Mathematics Teacher Education
- Master's degree** **2009**  
Yildiz Technical University, Istanbul  
Mathematics  
Thesis: İkinci Mertebeden Lineer Diferansiyel Denklemlerin Seri Çözümleri (Series Solutions of Second Order Linear Differential Equations)  
Supervisor: Erdal GÜL  
Degree: Department's 1<sup>st</sup>
- Bachelor's degree** **2006**  
Kocaeli University, Kocaeli  
Mathematics  
Degree: Department's 7<sup>th</sup>

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## RESEARCH & TEACHING EXPERIENCE

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- Research Assistant** **2012-Continue**  
*Bahcesehir University, Istanbul - Mathematics Department*
  - Calculus I – Theory
  - Calculus I - Problem Solving
  - Calculus II - Theory
  - Calculus II - Problem Solving
  - Analysis I - Problem Solving
  - Analysis II - Problem Solving
  - Differential Geometry - Problem Solving
  - General Topology - Problem Solving
  - Mathematics for Social Sciences - Problem Solving
- Mathematics Teacher** **2009-2011**  
*Fen Bilimleri Private Teaching Institution, Istanbul*
  - High School Mathematics Courses

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#### PUBLICATIONS (JOURNALS)

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- *Classification of Motor Imagery Task by Using Novel Ensemble Pruning Approach*  
Muhammad Ammar ALI, Duygu ÜÇÜNCÜ, Pinar KARADAYI ATAS, Sureyya OZOGUR-AKYUZ  
IEEE Transactions on Fuzzy Systems, 2019
- *On the Trace Formula for a Differential Operator of Second-Order with Unbounded Operator Coefficient*  
Erdal GÜL, Duygu ÜÇÜNCÜ  
Sigma Journal of Engineering and Natural Sciences - Sigma Mühendislik ve Fen Bilimleri Dergisi, 2018

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#### PUBLICATIONS (CONFERENCES)

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- *Novel Ensemble SVM Algorithm for Classification of Motor Imagery Task (Abstract)*  
Duygu ÜÇÜNCÜ, Muhammad Ammar ALI, Pinar KARADAYI ATAS, Sureyya OZOGUR-AKYUZ  
30th European Conference on Operational Research, 2019
- *Optimality Conditions for Sparse Quadratic Optimization Problem*  
Duygu ÜÇÜNCÜ, Süreyya AKYÜZ, Erdal GÜL, Gerhard Wilhelm-WEBER  
International Conference on Engineering Optimization, 2018
- *Seyrek Kuadratik Optimizasyon Problemi için Optimalite Koşul İncelemesi (Abstract)*  
Duygu ÜÇÜNCÜ, Süreyya AKYÜZ, Erdal GÜL, Gerhard Wilhelm WEBER  
38. Yöneylem Araştırması ve Endüstri Mühendisliği Ulusal Kongresi (YAEM 2018), 2018
- *On the Trace Formula for a Differential Operator of Second Order with Unbounded Operator Coefficients (Abstract)*  
Erdal GÜL, Duygu ÜÇÜNCÜ (2017)  
13th Algebraic Hyperstructures and its Applications (AHA2017)
- *On regularized trace of a differential operator of second order*  
Erdal GÜL, Duygu ÜÇÜNCÜ  
AIP Conference Proceedings, 2016

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#### RESEARCH AREAS

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- Sparse Quadratic Non-Convex Optimization
- Machine Learning
- Ensemble Pruning
- Numerical Optimization
- Analysis
- Mathematical Modelling

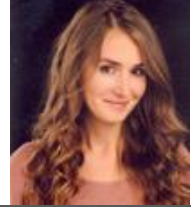
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#### LANGUAGES

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- Turkish – Natural Language
- English – Advanced in Reading, Writing, Speaking
- French – Beginner

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#### TECHNICAL SKILLS

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- MS Office – High Capacity
- Weka – High Capacity
- MATLAB – Intermediate
- Python – Intermediate
- C++ – Beginner
- Java – Beginner

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#### MEMBERSHIPS

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- EURO (Association of European Operational Research Societies)

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#### CERTIFICATES

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- Summer School on Optimization, Big Data and Applications (OBA)  
Universita Degli Studi Firenze, 30<sup>th</sup> June – 6<sup>th</sup> July 2019
  - Using Optimization Toolbox and Machine Learning in Matlab, 18-19 May 2013
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