



# İsmail Güzel

Research and Teaching Assistant,  
Istanbul Technical University

✉ Istanbul Technical University,  
Faculty of Science and Letters,  
Mathematics Engineering Department,  
Maslak, TR-34469

🌐 <https://web.itu.edu.tr/iguzel/>

@ ismailgzl@gmail.com

## Social Network

in LinkedIn Profile Link

🐙 Github Project Page Link

## Languages

Turkish (native) ●●●●●  
English ●●●●●

## Computer Skills

### Computation

Julia, C, R, Python, Matlab

### CAS

Mathematica, SageMath, Maple

### Miscellaneous

Linux(Bash scripting), Office programs, LaTeX

## Certificates

Certificate of Brain Training  
Certificate of Chess Games

## Education

2017– ongoing	<b>Ph.D. in Mathematics Engineering</b>	Istanbul Technical University
	Thesis on Topological Data Analysis and Machine Learning Algorithms	
	Advisor: Prof. Dr. Atabey Kaygun	
2010 – 2014	<b>M.Sc. in Mathematics (with thesis)</b>	Dokuz Eylül University
	GPA: 3.88/4.00	
	Thesis on highest eigenvalues of Regular Sturm-Liouville Problems	
	Advisor: Prof. Dr. Şennur Somali	
2015 – 2016	<b>B.Sc (Major) in Mathematics</b>	Dokuz Eylül University
	GPA: 3.81/4.00	
	Graduated as Valedictorian	
2014 – 2015	<b>Pedagogical Formation in Mathematics</b>	Dokuz Eylül University
2012 – 2015	<b>B.Sc (Minor) in Statistics</b>	Dokuz Eylül University
	GPA: 3.29/4.00	
2012 – 2013	<b>Exchange Program in Denmark</b>	Aarhus University
	GPA: 3.66/4.00	
	Project: The solving equations via Eigenvalues and Eigenvectors	
	Advisor: Anders Nedergaard Jensen	

## Publications and Scientific Activities

2020	<b>Hierarchical Clustering and Zeroth Persistent Homology</b> arXiv Güzel, İ., Kaygun, A.
2019	<b>Operator splitting methods for computation of eigenvalues of regular Sturm-Liouville problems</b> Surveys in Mathematics and its Applications Güzel, İ., Adıyaman, M., Somali, S.
2016	<b>Computing Eigenvalues of Regular Sturm-Liouville Problems</b> The 3rd Workshop of Association for Turkish Women in Maths May, 27-29 Izmir, TURKEY Ş. Somali and İ. Güzel

## Working Experience

2018 – ongoing	<b>Research and Teaching Assistant</b>	Istanbul Technical University
2015 – 2018	<b>Mathematics Teacher</b>	BAYSEM

## Scholarships

2017 – ongoing	The Scientific and Technological Research Council of Turkey, Grant 2211-A
2014 – 2016	Republic of Turkey, State Scholarship(for masters education)
2011 – 2014	Zorlu Foundation Fellowship

## Projects

2020 – ongoing	The Scientific Research Projects ITU ( about PhD Thesis)
2021 – ongoing	The Scientific and Technological Research Council of Turkey, Grant 2214

## Honors-Awards

2014	Graduate ranking first in Science Faculty
2011 – 2014	Certificate of high honor by Science Faculty Dean