

Curriculum Vitae	
Personal information	
First name(s) / Surname(s)	CIHAN BILGE / KAYASANDIK
Address(es)	Istanbul Medipol University, Kavacık Kuzey Kampus, Kavacık, Beykoz, ISTANBUL, TURKEY
Phone(s)	Mobile:
E-mail	cbkayasandik@medipol.edu.tr
Nationality	Turkish
Date of Birth	14/05/1989
Gender	FEMALE
Research/Work Experience	
Dates	From (07/2019)- To
Name of Institution/Company, City and Country	Istanbul Medipol University/ Istanbul/Turkey
Name of Institute/Department	School of Engineering and Natural Sciences/ Computer Engineering
Position Held	Assistant Professor
Main Activities and Responsibilities	Research: morphometric analysis of cells, tree structure extraction methods, machine learning methods application on medical data and image analysis Teaching: Linear Algebra and Differential Equations, Probability and Random Variables, Discrete Mathematics, Introduction to Formal Languages and Automata Theory
Dates	From (07/2018)- To (07/2019)
Name of Institution/Company, City and Country	Istanbul Medipol University/ Istanbul/Turkey
Name of Institute/Department	School of Engineering and Natural Sciences/ Computer Engineering

Position Held	Post doctoral Reseacher
Main Activities and Responsibilities	<u>Research</u> : morphometric analysis of cells, tree structure extraction methods, machine learning methods application on medical data and image analysis <u>Teaching</u> : Linear Algebra and Differential Equations, Probability and Random Variables, Discrete Mathematics, Introduction to Formal Languages and Automata Theory
Dates	From (08/2017) – To (06/2018)
Name of Institution/Company, City and Country	The University of Houston/Houston/U.S.A.
Name of Institute/Department	Mathematics Department
Position Held	Postdoctoral Researcher
Main Activities and Responsibilities	<u>Research</u> : morphometric analysis of cells, tree structure extraction methods, machine learning methods application on medical data and image analysis
Career Breaks	
Reasons for Interrupting Career	
Overseas Experience (if applicable)	<i>The University of Houston/Houston/U.S.A. as Postdoctoral Researcher [From (08/2017)-To (06/2018)]</i> <i>The University of Houston/Houston/U.S.A. as Teaching Assistant for Calculus I, II & III [From (08/2012)-To (08/2017)]</i>
The total duration of time spent on research	<input type="checkbox"/> < 4 years <input checked="" type="checkbox"/> 4- 10 years <input type="checkbox"/> > 10 years
Academic Profile and Fellowship Period	
Dates	From (08/2012) – To (09/2017)
Title of qualification awarded	Ph.D.
Name of Institution, /City and Country	The University of Houston/Houston/U.S.A.
Name of Faculty/Department/Major	Mathematics Department
Research area(s)	Medical Image Analysis, Harmonic Analysis, Pattern Recognition
Title of thesis/dissertation (if applicable)	Geometric Multiscale Analysis and Applications to Neuroscience Imaging
Thesis/dissertation advisor(s)	Prof. Demetrio Labate
Grade obtained	3.67/4.00
Dates	From (09/2007) – To (06/2012)
Title of qualification awarded	BS
Name of Institution, /City and Country	Bilkent University/Ankara/Turkey

Name of Faculty/Department/Major	Mathematics Department		
Research area(s)	Harmonic Analysis, Number Theory		
Title of thesis/dissertation (if applicable)			
Thesis/dissertation advisor(s)			
Grade obtained	3.31/4.00		
Personal skills and competences			
Mother tongue(s)	Turkish		
Other language(s)	English, French (beginner)		
Self-assessment in English	Understanding	Speaking	Writing
Level (poor, fair, good, very good, excellent)	excellent	excellent	excellent
Social skills and competences	2004-2007 Kabatas High School Folk Music Society, violinist 2005-2006 Uskudar Turkish Music Society, violinist 2008-2010 Ankara Turkish Music Society, violinist 2007-2008 Community Volunteers Foundation, member 2011-2012 Bilkent University Photography Club, member		
Institutional skills and competences			
Technical skills and competences			
Computer skills and competences	Computer languages: MATLAB, Python, Java, R, LATEX, Microsoft Office Cell Analysis tools: ImageJ, Fiji, Vaa3d		
Awards and honours	National Scholarship for Undergraduate Students — TUBITAK Sep 2007–Aug 2012 Undergraduate Student Scholarship — Bilkent University Sep 2007–Aug 2012 Graduate Student Scholarship — University of Houston Aug 2012- present		

<p>Publications</p>	<ul style="list-style-type: none"> • J. Di Re, C. Kayasandik, G. Botello-Lins, D. Labate, and F. Laezza, "Imaging of Axon Initial Segment." <i>Current Protocols in Neuroscience</i> 89, no. 1 (2019): e78 • C. Kayasandik, K. Guo, and D. Labate, "Directional multiscale representations and applications in digital neuron reconstruction" <i>Journal of Computational and Applied Mathematics</i>, 2018 • C. Kayasandik, P. Negi, F. Laezza, M. Papadakis, and D. Labate "Automated sorting of neuronal trees in fluorescent images of neuronal networks using NeuroTreeTracer", <i>Scientific reports</i>, 8, 2018 • W. C. J. Hsu, P. Negi, M. N. Nenov, T. F. James, C. Kayasandik, A. Limon, ... F. Laezza (2017, November). "Akt Dysfunction Leads to Structure-Function Changes in the Voltage-Gated Na plus Channel Complex at Axonal Initial Segment That Mimic Endophenotypes Associated With Schizophrenia" In <i>NEUROPSYCHOPHARMACOLOGY</i> (Vol. 43, pp. S224-S225)., ENGLAND: NATURE PUBLISHING GROUP. • C. Kayasandik and D. Labate, "Improved detection of soma location and morphology in fluorescence microscopy images of neurons", <i>Journal of Neuroscience Methods</i>, 2016
<p>Research Projects</p>	<p><i>Electrical Modelling of Neurons, as researcher, PI: Demetrio Labate</i></p>

<p>Conferences and Workshops</p>	<p><u>Conferences:</u></p> <ul style="list-style-type: none"> • Automated Sorting of Neuronal Trees in Fluorescent Images of Cultured Neurons Using NeuroTreeTracer Poster presentation at 16th Annual GCC Conference on Theoretical and Computational Neuroscience, Auditorium BioScience Research Collaborative, Rice University, 2019. • A Multiscale Geometric Descriptor for the Automated Extraction of Somas in Fluorescent Images of Neurons Poster presentation at 14th Annual GCC Conference on Theoretical and Computational Neuroscience, Auditorium BioScience Research Collaborative, Rice University, January 2017. • A Multiscale Geometric Descriptor for the Automated Extraction of Somas in Fluorescent Images of Neurons Poster presentation at 15th Annual GCC Conference on Theoretical and Computational Neuroscience, Auditorium BioScience Research Collaborative, Rice University, January 2018. • A Multiscale Geometric Descriptor for the Automated Extraction of Somas in Fluorescent Images of Neurons Poster presentation at FFT 2016, Norbert Wiener Center at U Maryland College Park, February 2016. (fully-funded) <p><u>Workshops:</u></p> <ul style="list-style-type: none"> • Mathematical and Numerical Methods in Image Processing, 2016 Summer School, Berlin Mathematical School, 25 July-5 August 2016. (fully-funded)
<p>Professional Memberships</p>	
<p>Other Professional Activities</p>	