Üzeyir Saçıkay

Mailing address: Baglica, 1291th Street, 8/15, Etimesgut/Ankara/Turkey, 06790 e-mail: uzeyirsacikay [at] gmail.com

Personal Info

Date of Birth: 2 November 1997

Nationality: Turkish

Education

Boğaziçi University, Istanbul, Turkey

B.Sc. in Physics 2017 - 2021
 Double Major in Mathematics 2018 - 2021

Combined GPA: 3.51/4.0 (High Honor),

Graduated as the Valedictorian of Physics Department.

B.S. in Physics, Bilkent University, Ankara, Turkey

Transferred to Boğaziçi University at the end of 1st year, GPA: 3.75

Research Experience

- Studied non-perturbative effects and Stokes phenomenon for one semester with Prof. Dieter Van den Bleeken under the elective course Phys 492: Introduction to Research in Physics.
- Studied representation theory of semisimple Lie algebras following the textbook Representation Theory: A First Course by Fulton & Harris for one semester with Prof. Arzu Boysal.

Job Experience

- <u>Data Scientist at Swarmnect</u>: I worked on Driver Behavior Analysis (DBA) problems, utilizing the on-board vehicle diagnostics data. 04/2022 09/2022
- Software Engineer II at Trilogy Inc.: I got hired through Crossover for Work
 and worked remotely as a software engineer under the role of Software Engineer
 II. I mainly worked on the backend service, did refactoring and bugfixes before
 the product is deployed. I used C#, TypeScript and SQL. 10/2021 12/2021

Scientific Events and Activities

Scientific Events I. Talks/Presentations Given

• Neural Networks and Deep Learning, Directed Reading Program (DRP) Turkey 2022, İstanbul	Summer 2022
• Serre-Swan theorem, Math 58D course at Boğaziçi University, İstanbul	Fall 2021
• Algebraic structure and properties of $C^{\infty}(M)$ and $\Gamma(TM)$, Phys 58H course at Boğaziçi University, İstanbul	Fall 2021
• A group mod its center, $G/Z(G) \cong \text{Inn}(G)$ and the universal	
cover of a Lie group mod its fundamental group, $G \cong \tilde{G}/\pi_1(G)$ quotient constructions, Phys 58H course at Boğaziçi University, İstanbul	Fall 2021
• Manifold structure of projective spaces \mathbb{RP}^n and \mathbb{CP}^n , Phys 58H course at Boğaziçi University, İstanbul	Fall 2021
• Representation theory of semisimple Lie algebras, Boğaziçi University, İstanbul	Spring 2020
 Irreducible representations of \$\silon l_2(\mathbb{C})\$, 7th Bahar Mathematics Meeting, İstanbul 	Spring 2020
• Hilbert spaces and Hermitian operators in Quantum Mechanics	, Spring 2020

Math 436 course at Boğazici University, İstanbul

	 Clifford algebras and spin groups, Math 58Y course at Boğaziçi University, İstanbul Fall 2019 	
	• Spaces of constant curvature in Lorentzian signature, Fall 2019 Math 474 course at Boğaziçi University, İstanbul	
	• Non-perturbative effects and Stokes phenomenon, Spring 2019 Boğaziçi University, İstanbul	
	• Minimal surfaces, Math 475 course at Boğaziçi University Spring 2019	
	• On non-planarity of hypercube graphs Q_n for $n > 4$, Nesin Mathematics Village, Şirince/İzmir	
II. Seminars, Workshops and Summer Schools Participated		
	• Khovanov Homology Student Workshop, Spring 2022 Gökova Geometry Topology Institute, Muğla, Turkey	
	• Algebraic Geometry in the Time of COVID, Summer 2020 Online, Ran by Ravi Vakil	
	• Lectures on Category-theoretical Formulations of Field Theories, Fall 2019 IMBM, Boğaziçi University	
	• Introduction to Quantum Programming Workshop, Summer 2019 Boğaziçi University, İstanbul	
	• The 2nd Geometry and Topology Summer School, Nesin Mathematics Village, Şirince, İzmir, Turkey	
	• Lectures on General Relativity: The Theory of Gravitation, Summer 2019 Nesin Mathematics Village, Şirince, İzmir, Turkey	
	• International School of Subnuclear Physics (ISSP), Awarded Full Scholarship, EMFCSC, Erice, Sicily, Italy	
	• Introduction to Quantum Programming, Boğaziçi University Spring 2019	
	• 2nd Istanbul Theoretical Physics Days, Mimar Sinan Spring 2019 Fine Arts University Physics Department, Istanbul	
	 Phase Transitions and Renormalization Group, Kadir Has University, Istanbul, One semester open-course by Prof. Nihat Berker 	
	• Workshop on Complex analysis and Functional analysis, Fall 2019 TMD Ankara, Middle Earth Technical University, Ankara	
	 Attended various Mathematics and Physics lectures at Nesin Mathematics Village every summer and winter between 2017-2019 	
Scholarships	 Undergraduate Scholarship for Natural Science Students awarded by TÜBİTAK Scientific Council 	
Language Skills	Turkish: Native English: Fluent (IELTS: 8/9) French: Intermediate	
Programming Skills	Python C/C++ SQL C# MATLAB TypeScript	
	$\underline{ \text{Python Libraries:}} \text{ NumPy, pandas, scikit-learn, TensorFlow, keras, matplotlib, plotly}$	
	I participated in national olympiads in informatics during my high school years.	