

## The Undergraduate Research Projects to be supported by AdımODTÜ in 2021

Project No	Project Name	Supervisor Name	Research Team
E4	Turkish Medical Students in COVID-19 Pandemic: Effects of Academic Stress and Coping Strategies on Insomnia	Prof. Dr. Özlem Bozo-Özen	Meryem Özarıslan-Sevilay Arı
A17	Optimizing an Universal Agar Medium to Apply Fe Deficiency to Plants	Assist. Prof. Dr. Seçkin Erođlu	Eylül Korkmaz
E3	Investigation of the Relationship Between Loneliness and Death Anxiety in Elderly Living at Home in the COVID-19 Pandemic with the Moderation Role of Task Self-Efficacy	Prof. Dr. Özlem Bozo-Özen	Meyra Çakar - Şeyda Arslan
E7	Development of Social Media Trust Scale	Prof. Dr. Bengi Öner-Özkan	Beyza Gülzehrâ Ekinci Rümeysa Tosun- Hande Hanım Büyüktaş - Enes Kor
E1	A Study on the Motivations, Expectations, and Job Perception of Angel Investors	Prof. Dr. H. Sibel Kalaycıođlu	Anılcan Duymaz Zeynep Dicle Gülhan
D8	QRegister	1	Deniz Karakay - Alkım Dömeke Humeyra Bodur - Murat Kaş
A14	Determination of Transcript Variants for Gynecological Cancers	Prof. Dr. Elif Erson-Bensan	Elanur Almeriç- Didem Naz Döken
E2	Examining the Relationship Between Similarity and Recency Intrusions Under the Scope of SAM Model by Immediate Serial Recall and Immediate Free Recall	2	Fatih Yavuz
A7	MLL1 Inhibitor	Prof. Dr. Sreeparna Banerjee	Olka Missaghimamaghani Fatimah Safieh - Ilir Sheraj
A5	Detection of Essential Phosphorylation Sites on $\beta$ 2 Adrenergic Receptor for $\beta$ Arrestin 2 Binding	Assoc. Prof. Dr. Çağdaş Devrim Son	Tolgahan Suat Sezen- İrem Aydın

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Project No	Project Name	Supervisor Name	Research Team
A10	Systematic Investigation of Unknown grasses of Festuca Genus from the Mountains of the Black Sea Region in Turkey	Prof. Dr. Musa Doğan	Gencer Yaprak- Halime Karatoprak Jelena Erdal
J6	Investigation of Potential for Nuclear Waste Storage in Underground Hard Rock Caverns Considering the Thermal Damage Effect on Elastoplastic Geomechanical Properties	Assist. Prof. Dr. Ahmet Güneş Yardımcı	Taci Emre Altıntaş Alak Abdulsatar Abduljabar Abduljabar
K1	History of METU Department of Architecture: The Archive of the Academics and the Courses	Prof. Dr. T. Elvan Altan Assist. Prof. Dr. Pelin Yoncacı-Arslan	Kemal Yılmaz - Gülsen Namıduru
E8	Effect of Haptic Exploratory Processes on Online Shopping Experience	Assist.Prof.Dr. Dicle Nahide Dövençioğlu	Fatma Çelebi- Hümeyra Aybüke Bilir İzel Deniz Vardar
C6	The Upcycling of Waste Fried Oils	Assist. Prof. Dr. Simge Çınar	Duygu İnce - Ecem Baskın Anıl Yılmazkan -Melda Öcalan
E5	Effect of Auditory Cues on Object Perception	Assist.Prof. Dr.Dicle Nahide Dövençioğlu	Ömer Faruk Yıldırım
A9	Cell Cycle Dependent Regulation of CXXC5 Gene Expression	Prof. Dr. Mesut Muyan	Hazal Ayten - Pelin Toker
G7	Synthesis, Neutron Sensitivities and Drug Delivery Capacities of Borate Nanoparticles, MB407 (M:Ca,Mg,Sr)	Prof. Dr. Ayşen Yılmaz	İpek Yıldırım - Mine Kocatus Özde Ceren Hızal Abacı
A13	Investigating Effect of Excess Heat on Iron Nutrition of Arabidopsis Thaliana	Assist. Prof. Dr. Seçkin Eroğlu	Mehmet Onur Barut
B4	Parametric Aerodynamic Analyses and Design of a Jet Aircraft by Using Panel Method	Assoc. Prof. Dr. Nilay Sezer-Uzol	Fatma Zülal Kumser- Pamir Kıldış Ümran Öztürk
A12	Determination of the Potential Membrane Localization of Botulinum Neurotoxin A Cleaved SNAP-25 Fragment	Assist. Prof. Dr. Erkan Kiriş	Ece Sönmez - Dilara Koç Sena Ezgin
A11	Determination of the Pro-Neurotrophin Receptor Sortilin Protein Expression in Mouse Embryonic Stem Cells	Assist. Prof. Dr. Erkan Kiriş	Fulya Kızıldağ - Peri Beşarat

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C7	Investigation and Optimization of Parameters Affecting the Coating on Mg for Aircraft Structures to Protect Corrosion	Prof.Dr. İshak Karakaya	Ezgi Demir - Seda Kartal
D5	Designing Low-power, Low-cost and Robust LoRa Based Wireless Communication Unit to Enhance Smart Agriculture	Assist. Prof. Dr. Ozan Keysan	Erdem Canaz - Işık Emir Altunkol Mohammad H. Mokhtare, Ph.D. (cosupervisor)
D7	Field Teams Coordination for Disaster Management	Assist. Prof. Dr. Ebru Aydın-Göl	İlker Işık
H4	COVID-19 Effects on Syrian Refugees in Turkey	Assoc. Prof. Dr. Pınar Derin-Güre Assist. Prof. Dr. İlhan Can Özen	Ecem Yargıcı
A6	The Establishment of Drug-Resistant Single Barcode-Derived Colorectal Cancer Cell Lines	Assist. Prof. Dr. Ahmet Acar	Gizem Damla Yalçın- Sıla Karakuş- Ecesu Özdal- Ekin Başar Gökçe
G6	Phosphorus-Containing ZrO <sub>2</sub> Catalyst for Non-Oxidative Dehydrogenation of Propane	Assist. Prof. Dr. Gökhan Çelik	Asena Kızıl
D6	CS-Trust2vec / Context-Sensitive Trust Network Embedding Model	Prof. Dr. Pınar Karagöz Prof. Dr. İsmail Hakkı Toroslu	Onat Özdemir
A8	The Impact of Extracellular Lipids on Brain Tumor Metabolism	Assist. Prof. Dr. Süleyman Coşkun	Menderes Karakaş
J4	Bamboo Biochar as an Additive to Improve Performance of Lime Based Composites	Assist. Prof. Dr. Çağla Meral-Akgül	Ferhat Ozan Çakır
D10	Autonomous VTOL UAV	Prof. Dr. Kemal Leblebicioğlu	Erhan Ege Keyvan Kurtuluş Kerem Şahin Onat Deniz Doğan Oğuzhan Şenbaş Baturalp Kaya Furkan Çitil Edip Ahmet Ünlüer
D11	Estimating the Flowfields Around Airfoils	Assist. Prof. Dr. Hande Alemdar Assist. Prof. Dr. Özgür Uğraş Baran	Adnan Harun Doğan- Ali Doğan Dr. Cihat Duru (co-supervisor)
E10	Cultivating Inter-group Empathy: The Effect of Out-group Autobiographical Accounts on Empathy, Attitudes and Behavior	Assoc. Prof. Dr. Başak Şahin-Acar	Ahmad Alhasan
G4	Comparison of Anomaly Detection Techniques in Univariate Time Series Analysis	Assoc. Prof. Dr. Ceylan Talu-Yozgatlıgil	Mehmet Arslan- Barış Kaan Alagöz İpek Aydın- Niyazi Berk Aydın

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B2	Fener the Object Tracking Robot	Prof. Dr. Klaus Werner Schmidt	Evren Uçar - Meral Şahin - Muhammed İzzet Sezer-Rüya Gülşah Ulutaş-Şevval Belkıs Dikkaya-Yusuf Onat Yılmaz
C2	The Production of Marginal Metallic Glass by Mechanical Milling	Prof. Dr. Yunus Eren Kalay	Sabri Ufuk Arısan - Yasemin Zeynep Nar- Zeynep Ege Uysal
H3	How Voting, Income Inequality and Different Progressive Tax Systems Affect Tax Evasion?	Assist. Prof. Dr. Mürüvvet Büyükboyacı-Hanay	Gizem Mutluoğlu
J2	Denoising and Outlier Removal from Permanent Downhole Gauge Using Nonlinear Regression Methods	Assist. Prof. Dr. Fulya Gökalp-Yavuz	Fehmi Özbayrak
B3	METU ROVER	Assoc. Prof. Dr. Ahmet Buğra Koku	Arda Özarslan - Güven Öner- Alptuğ Öztaşkın - Ahmet Altuğ Çiçekdağı - Furkan Kaan Çelik - Mahmut Bahadır Özbek - Arda Kaya - Öykü Çise Şahintaş -Rufat Bayramov - Evren Uçar - Taha Tolga Saadet - Abdulkadir Sarıtepe - Rabia Öztopal Onur Karakoç - Adnan Harun Doğan Cafer Selli - Mert Saadet - Tayyip Öztürk - Yusuf Onat Yılmaz - Alev Ayaz - Aysima Beril Baydar - Kaan Dere - Ceren Yıldız - Evrim Tunç Topuz - Bartu Yaman - Berk Ünlü
B13	Steel-Core Radial Flux Electric Motor	Prof. Dr. Erhan İlhan Konukseven	Yalın Şahin - Emre Dağ - Ufuk Can Karataş - Egemen İlikmen - İzzet Uluğ
B6	Aerodynamic Analysis of Supersonic Flow over Aircraft Geometries by using PANAIR Panel Method Solver	Assoc. Prof. Dr. Nilay Sezer-Uzol	Levent Uğur Ramazan Kürşat Gedik- Sena Turan
C9	Fabrication of Ag/AgCl Reference Electrodes via Additive Manufacturing	Assist. Prof. Dr. Simge Çınar	Ekin Kurşun Müge Damla Numanoglu
A3	Investigation of Candidate Genomic Biomarkers with Pyrosequencing for COVID-19 Severity in Turkey	Assoc. Prof. Dr. Yeşim Aydın Son	Yavuzhan Çakır

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C10	Hydroxyapatite/Silk Sericin Nanoparticles for Drug Detoxification Applications	Assoc. Prof. Dr. Batur Ercan	Arda Çalışkan
H5	Impact of COVID 19 on Residential Housing Prices in Turkey	Assoc. Prof. Dr. Pınar Derin-Güre	Dolunay Gülşah Arıcı
H6	Economic Obstacles to Women's Political Freedom: A Portrait of the Politically Active Women in Turkey	Assoc. Prof. Dr. Aylin Topal	Öykü Kurun Deniz Hızlı
G2	Exploring Parameterized Quantum Circuits for Quantum Convolutional Neural Networks	Prof. Dr. Melahat Bilge Demirköz	İdil Ilgaz Kaya- Janset Turan
G3	Analysis of Attitudes and Behaviors of People Regarding the Disposable Products	Assoc. Prof. Dr. Zeynep Işıl Kalaylıoğlu	Merve Ekiz - Deniz Güvenç Tek Zehra Deniz Taş - Selin Erol Buse Daşdemir
J7	Coal Gas Characterization in Underground Coal Mines by Using Gas Chromatography	Prof. Dr. Nuray Demirel	Hasan Ekin Doğan
C5	PV Waste as a Sustainable Source of Pure Silicon for High Capacity Li-ion Battery Anodes	Prof. Dr. Mehmet Kadri Aydınol	Mehmet Nevzat Duman
C8	Autonomous Underwater Vehicle-ROV	3	Ege Hacışahinoğlu- Berkay Çağlı Aysu Balamutçu - Bora Hekimoğlu Pelin Turan - Emir Taylan Karakaş
G5	Effects of COVID-19 Pandemic in Turkey	Prof.Dr. Özlem İlk Dağ	Ayça Yaren Arslan - Elif Beyza Akyıldız Fatoş Aydın- Pelin Topaz
H2	Prosocial Corruption: An Experimental Study on Collaborative Dishonesty	Assist. Prof. Dr. Mürüvvet Büyükboyacı Hanay	Güneş Uğuz
J8	Production Integrated Drilling Simulation for Open Pit Mines (DRILL4PRO)	Assist. Prof. Dr. Onur Gölbaşı	Kaan Murat Akpolat- Eylül Eroğlu Veli Can Çetin - Artun Yıldız
A15	Synthesis of BODIPY Embedded Chitosan Nanoparticles for Enhancement of Antimicrobial Photodynamic Inhibition Activity	Assoc. Prof. Dr. Görkem Günbaş	Alara Özdemir - Naz Özoğul Işıl Soysal - Sena Tarım
D3	Piezo-Carpet	4	Kamil Anıl IŞIK

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J5	Enhancement of Thermal, Mechanical and Acoustical Performance of Cement-Based Composites Through Plant-Based Waste Yarn Addition	Assist. Prof. Dr. Çağla Meral Akgül	Can Berk Kayan
J3	Investigation of the Drought of the Konya Closed Basin with Hydrological Methods	Assoc. Prof. Dr. Koray K. Yılmaz	İhsan Gökay Bilici
B8	Tulpar UAV	Assist. Prof. Dr. Halil Ersin Söken	Enfal Çabuk - Barış Akış Mehmet Eren Tekelioğlu Mehmet Utku Düzen
H7	An Approach to Vegan and Vegetarian Food Market-based on Socioeconomic Relations and Sustainability	Assoc. Prof. Dr. Aylin Topal	Ekin Durmaz - Ecem Nur Güneş Ege Evrensel
B1	Aerodynamic Characterization of DU00-W-210 Airfoil at Low to Moderate Reynolds Numbers	Prof. Dr. Oğuz Uzol	Yankı Aloğlu
B9	METUOR Model Satellite	Prof. Dr. Erhan İlhan Konukseven	Emine Nur Yakın -Ataberk Öklü Ezgi Sena Karabacak Tan Çağatay Acar Ayşe İrem Akyıldız- Egemen İlikmen
B11	The Effects of Mutually Opposing Forces on Propulsion of Underwater Vehicles	Assist. Prof. Dr. Mustafa Mert Ankaralı	Atakan Durmaz- Firdevs Su Aydın Bedirhan Şen- Merve Nur Zembil Bengisu Deniz-Berkay Kılıç Enes Ata Ünsal-Demet Tangolar Altay Ata Ateş
C11	Molecular Modeling Studies on the Conducting Polymer-Graphene Nanocomposites	Assist.Prof.Dr. Erol Yıldırım	Servin Çağıl Ulusay
F1	Student Satisfaction in Online Education	Assist.Prof.Dr. Kadriye F.Barutçu Yıldırım	Öykü Polat - Ayşe Ö.Gündüz - Buse Karakaş - Ece N.Baytek - Nihan Saniç - Batuhan C. Sarraf- Ö.Faruk Yankaç - Burak Göç - Beril Sarı-Berkan Demir- Nureda Taşkesen
F5	Effects of Online Education on Language Learning Anxiety and The Place of “Universal Design for Learning” Model in Online Education	Assist. Prof. Dr. Pervin Oya Taneri	Sema Betül Demirezen - Şevin Kaya Ali Yıldız