

EEE491 Project Proposal List		
Proje Number	Advisor	Projet Name
1	Prof. Dr. Fırat HARDALAC	AI-Based Threat Detection and Avoidance Systems in Autonomous Unmanned Aerial Vehicles (UAVs)
2	Prof. Dr. Fırat HARDALAC	Development of a Modular System Integrated into Aerial Platforms for Forest Fire Early Warning and Rapid Response with Thermal Imaging and AI-Based Mapping
3	Prof. Dr. Fırat HARDALAC	AC-DC 45-Watt Single Output Flyback Converter
4	Prof. Dr. Müslüm Cengiz TAPLAMACIOĞLU	Frequency regulative inverter/converter design
5	Prof. Dr. Müslüm Cengiz TAPLAMACIOĞLU	Solar Tracking System with MATLAB-Based Monitoring and Clean Energy Storage
6	Prof. Dr. Erkan AFACAN	Drone Jammer
7	Prof. Dr. Erkan AFACAN	Smart Antenna System
8	Prof. Dr. Erkan AFACAN	ElGamal Encryption System
9	Prof. Dr. Saffet AYASUN	Prototype of Regenerative Braking System for Electric Vehicles
10	Prof. Dr. Saffet AYASUN	Designof PV Panel Cleaning and Damage Identification System
11	Prof. Dr. Hasan Şakir BİLGE	Multi-Camera Embedded Processing System for ADAS Services
12	Prof. Dr. Hasan Şakir BİLGE	Optimized FPGA-Based Hardware Accelerator for Deep Learning Applications
13	Prof. Dr. Nursel AKÇAM	Energy-Efficient X-Band Beamforming RF Chain: Single-Channel Design and Simulation Focused on a Passive 4-Bit Phase Shifter
14	Prof. Dr. Ali KARA	Non-Invasive Blood Glucose Level (BGL) Monitoring Device Using Microwave Sensing
15	Prof. Dr. Mehmet ÇİYDEM	Planar Antenna Array Design for 5G Base Stations
16	Prof. Dr. Mehmet ÇİYDEM	Antenna Array Design for Satellite S-Band Telemetry
17	Prof. Dr. Mehmet ÇİYDEM	Antenna Array Design for Satellite X-Band Telemetry
18	Prof. Dr. Ertuğrul AKSOY	Early Pattern Detection System for Algorithmic Trading in Stock Market
19	Prof. Dr. Bünyamin TAMYÜREK	Development of a 4-Channel PWM-Based DDV Valve Driver for Airborne Flight Control Actuators
20	Prof. Dr. Özgür ERTUĞ	Smart Home Integrated Earthquake Early Warning and Safety System
21	Prof. Dr. Özgür ERTUĞ	A Design Of The End-To-End Wireless Communication System Based On Autoencoder And Adalm-PLU
22	Prof. Dr. Tuğba Selcen NAVRUZ	Camouflaged Mobile Air Defense System Vehicle
23	Doç. Dr. Müjdat BALANTEKİN	Footsteps into Electricity
24	Doç. Dr. Süleyman Sungur TEZCAN	Analysis of the Impacts of Solar Power Plants (SPPs) on Distribution Networks and Development of Mitigation Proposals (Supported by EnerjiSA)
25	Doç. Dr. Süleyman Sungur TEZCAN	Engineering Measures to Prevent Electric Shock in Low Voltage (LV) Distribution Networks (Supported by EnerjiSA)
26	Doç. Dr. Mehmet Feyzi AKŞAHİN	Pilot Health Monitoring System
27	Doç. Dr. Mehmet Feyzi AKŞAHİN	Camouflaged Mobile Air Defense System
28	Doç. Dr. Derya YILMAZ	Automated Material Feeding and Distribution System
29	Doç. Dr. Derya YILMAZ	Autonomous Fire Detection Network
30	Doç. Dr. Derya YILMAZ	Detection of Flatfoot Disease Using Artificial Intelligence and Image Processing
31	Doç. Dr. Uğurhan KUTBAY	VisionLink: AI Powered Smart Glasses for Real Time Assistance and Connectivity
32	Doç. Dr. Korhan KAYIŞLI	Hybrid Solar Inverter with MPPT, Bidirectional DC-DC Converter, and IoT Monitoring
33	Doç. Dr. Korhan KAYIŞLI	Active Power Factor Correction with Different Control Techniques
34	Doç. Dr. Korhan KAYIŞLI	Active Ripple Suppression in Low-Voltage DC Bus Systems
35	Doç. Dr. Korhan KAYIŞLI	Multimodal Quality Control and Product Sorting System
36	Doç. Dr. Korhan KAYIŞLI	Intelligent Solar Energy Management System: MPPT Control, Battery Storage, and IoT Monitoring
37	Doç. Dr. Korhan KAYIŞLI	Smart Line-Following Robot with Memory
38	Doç. Dr. Mahmut Emin ÇELİK	3D Segmentation with Deep Learning in Dentistry
39	Doç. Dr. Mahmut Emin ÇELİK	Gesture-Controlled Navigation in an Augmented Reality Environment Using Wearable IMU Sensors
40	Doç. Dr. Hıdır DÜZKAYA	Solid State Transformer
41	Doç. Dr. Hıdır DÜZKAYA	Aircraft Electrical Power Distribution System Design
42	Dr. Öğr. Üyesi Mehmet KARAKAYA	Hybrid Energy Harvesting IoT Sensors for Sustainable Agriculture
43	Dr. Öğr. Üyesi Özgür ERGÜL	Follower Unmanned Aerial Vehicle (UAV)
44	Dr. Öğr. Üyesi Özgür ERGÜL	Spectrum Assessment Methods for Cognitive Radio
45	Dr. Öğr. Üyesi Bülent DAĞ	A Grid-Connected Small-Scale Wind Turbine Design
46	Dr. Öğr. Üyesi Bülent DAĞ	Automatic Hot Liquid Mixer
47	Dr. Öğr. Üyesi Bülent DAĞ	Solar Inverter System
48	Dr. Öğr. Üyesi Emrah DEMİR	BMS with ADALM Pluto SDR
49	Dr. Öğr. Üyesi Funda ERGÜN YARDIM	Autonomous Navigation and Deep Learning-Based Obstacle Detection in Unmanned Ground Vehicles (UGVs)
50	Dr. Öğr. Üyesi İhsan KANBAZ	Smart Near-Field Beamforming for Joint Localisation and Electronic Warfare Applications
51	Dr. Öğr. Üyesi İhsan KANBAZ	Real-Time Health Monitoring and Early Warning System Using Multi-Sensor Fusion