EE 4x97 - EE 4x98   FALL 2024 -2025

Project Name	Group Members
Transformer-Based Image Captioning for Chest X-Ray Images	İbrahim Beşiroğlu
Multi-query image retrieval	Mustafa Başboğa
Analyzing and reporting sales calls through image processing, audio processing and natural language processing.	İbrahim KOÇ, Mehmet Raşit GÜNDÜZ, Muhammed Muaz KOTAN
Application of a Harmonic Control Arrays (HCA) Method for Minimizing Total Harmonic Distortion in Single-Phase PWM Inverters.	Akif Yaşar Kurtgözü, Alper Akçay, Necip Farid Animasaun
Classification of blood cells within in-line hologram technology using machine learning methods	Ahmet Selman KARIŞAN, Emirhan Demir, Ruwaida Q. M. Almadi Almadi
Artificial Intelligence-Based Segmentation of Lung Structures in CT Images Using Deep Learning Techniques	Melih Fırat AKBAŞ
6-axis Robotic Arm Control Using Image Processing	Melik Yılmaz Güner
Driver position and driving status estimation from a stereo camera and a couple of HD cameras	Görkem Bektaş
3D Object Modeling Using Sequential/Random Image Segments	Fatih Karagöz
Optimization Algorithms in Energy Distribution	Abdullah Atak, Emir Salih Gündoğdu, Fahri Ramazan Geçgel
Multi-purpose nuclear energy technology complex, designed to supply electric energy, heat supply and provide desalinated sea water to resort areas of the Türkiye	Atakan Eroğlu, Hüseyin Aydın Tokhan
Energy Optimization in Electric Vehicles	Hasan Marangoz
Design and development of AI based job maching and recommendation system for wholesale companies	Nevzat Tarık Erbaş
Smart Field Sensor for Environmental and Solar Data Collection	Osman Emre Turan
IoT Based Smart Agriculture Monitoring System	Begüm Gürel, Rumeysa Şenol, Özge Soytürk
Implementation of a Non-Orthogonal Multiple Access (NOMA) protocol on a Software Defined Radio	Mehmet Akif Türkmenoğlu
Cloud-Based Smart and Secure Farming Application	Markos Gevez, Bahadır Çalık
Artificial Intelligence Supported Target Detection and Tracking Systems	Ebubekir Mutugan

EE 4x97 - EE 4x98	FALL 2024 -2025
Project Name	**Group Members**
Developing an OFDMA-NOMA communication system using a Software Defined Radio	Feyzullah Oğuz
Optimal Target Annihilation Algorithm Using Grey Wolf Optimizer	Zehra Aybala Ağırman
Zoom API Integration on a Local Website	Baran Orman
Dynamic Action Trigger System	Egemen ÖRNEKLİ, Muhammet Yücel ÇELİK
Determining Driver Drowsiness by Using Image Processing of Real-Time Data from Non-Smart Vehicle Front Camera in Driver Assistance Systems	Barış Tuna
Integration Mail Editor on webpage using Laravel	Yusuf Genç
V2G Integrated Route Planning Platform for Electric Vehicles	Kaan Atalay
Cyberattack Impact Analysis on Autonomous Ships	Batuhan Akoğlan
Design and Verification of AXI Protocol for High-Performance On-Chip Communication	Ömer Faruk TONBULOĞLU
RiscV Based Processor Design	Arif Yardım
A RISC-V processor design and verification on FPGA.	Ayhan Karaca
IoT Based SmartAir Analyser	Miray Tüzüner, Semiha Şen
IoT-Based Monitoring and Analysis of Energy, Temperature, and Pressure with Alarm System and Carbon Footprint Evaluation	Burak Erdem
Real Time seperation of recycable materials using object detection and robotic arm automation	Ali Kömürcü
Develop a robotic arm controlled by voice commands that adapts to user inputs using machine learning	Ahmet Mert Yırık
Machine Learning Based Daily Energy Demand Forecasting	Fatma Atak, Yunus Emre Kılıçkıran
Enhanced-bandwidth Microstrip patch antenna using a multi-layer design.	Yunus Emre Turunç
A Sensitive Microwave Sensor for Dielectric Constant Measurement	Baran Can Kadıoğlu, Alperen Yıldız
Characterisation of the Opto-thermal Effects of IR Light on Collagen V	Vildan Sena Kaya
Real-Time Object Identification Using LiDAR Information for Autonomous Vehicles.	Dilek ÇELİK

EE 4x97 - EE 4x98	FALL 2024 -2025
Project Name	**Group Members**
Autonomous Rover for Live Detection and Mapping Under Debris	Ayça Damla DEMİR
Non-intrusive load monitoring with Differential Privacy	Berkant Şimşek
Precise Fullbody Tracking and Indoor Positioning using Ultra-Wideband Sensors	Egemen KAZANASMAZ, Irfan YUCESAN
Dynamic Voltage Regulation in Power Systems: The Role of PVs, Smart Inverters, and Transformer Adjustments	Muhammed Turhan ÇAKIR, İrem Sude ESEN
Rf Power Measurement	Mehmet Ali Kamalak
Growth of plants under electromagnetic waves	Abdullah Eren Doğan
Electromagnetic Field Effects of Bluetooth Earphone on Human Tissues	Alper Batar, Mustafa Eren Öztürk
6G RF Key Quantities for 6G Development	Furkan UÇAK
RF and LF Electomagnetic Measurements	İsmail Arat, Furkan İbiş, Abdülkadir Köroğlu
Biological Effects of Electromagnetic Field Studies on Human Tissues	Memet Kaya
Artificial Intelligence Supported Driver Pose Estimation	Murathan Elcuman, Said Bora Özdamar
LIDAR based Target tracking using Kalman Filter Algorithms and Deep Learning	Öykü Dur,Aylin Doğan
Artificial Intelligence-Based Traffic Control System Using Embedded Systems and Deep Learning Techniques	Sezgin Er
Autonomous Source Seeking Nano Quadcopter UAV System	Ada Nazlıcan Akcura
A Reinforcement Learning Model for Industrial Filling Process Control	Furkan Atalay
Distinguishing Emotional States from Physiological Sensors	Sude Bulut