



## itac List of Accepted Graduation Projects - Academic Year 20/21

Project ID	Project Title	University Name
GP2021.R16.4	Smart Glove for the voiceless	Canadian International Collage
GP2021.R16.5	Smart Satellite	Benha University
GP2021.R16.6	Smart City using IoT System and Artificial Intelligence	Menofia University
GP2021.R16.7	Auto Updated Streets-Information on Map	Cairo University
GP2021.R16.9	Arabic text visualization	Alexandria University
GP2021.R16.12	ASIC Physical Design of RISC-V Core Processor for Self-Driving Automotive Applications	Cairo University
GP2021.R16.13	ChipNet CNN Hardware Acceleration on FPGA and ASIC for 3D Lidar and Camera Images in Autonomous Vehicles Integration of Federated Machine Learning in Smart Metering	Zewail city of science and technology  Canadian Higher Institute Technology and
GP2021.R16.14	System.	Management.
GP2021.R16.15	Chatbot for Mode Enhancement of Drivers in Egyptian Dialect.	Cairo University
GP2021.R16.16	Analog Layout Automation using Machine Learning	Cairo University
GP2021.R16.19	Automatic Post-Layout Generation of Analog Designs using Reinforcement Learning to reduce the design time and increase productivity.	Zewail city of science and technology
GP2021.R16.20	Machine Learning Hardware Acceleration for Advanced Driving Assistance Systems (ADAS)	Cairo university
GP2021.R16.21	5G Performance Improvement using Massive MIMO and Beamforming project "PDSCH-RX"	Cairo University
GP2021.R16.22	A Novel Real-Time Tourist Attraction Platform for Marine Life Species Based on Artificial Intelligence	Nile University
GP2021.R16.23	Digital Design and Verification of Safety-Critical Automotive Application	Cairo University

	RISC-V Based CNN Hardware	
	Accelerator for Artificial Intelligence	
GP2021.R16.25	Applications	Cairo University
GP2021.R16.26	Four Wheel Agricultural Robot	Nile University
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GP2021.R16.27	Al Based Lane Change Decision-Making for Autonomous Vehicle	Nile University
	Design and Implementation of a Synthesizable RTL PCI-e	
GP2021.R16.31	Physical Layer Logical Part for GPUs Interconnection	Cairo University
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	Floating point unit implementation and Verification for	
GP2021.R16.33	Machine Learning and AI Applications	Cairo University
	Implementation and Functional Verification of RISC-V Processor	
GP2021.R16.34	for IoT Applications	Cairo university
	Design and Fabrication of 5G Reconfigurable Antenna Based on	University of Science and Technology, Zewail
GP2021.R16.35	RF MEMS switches	City
	Transportation Vehicles with AI-enabled preliminary diagnostic	
	detector embedded system for COVID-19 from cough sound	
GP2021.R16.37	and fever.	Cairo University
	Digital Implementation of the RISC-V based Open PULP Core for	
GP2021.R16.38	Machine Learning applications (Hardware Acceleration).	Zewail city of science and technology
	Brain-computer interface based control for next-generation	
GP2021.R16.39	electric wheelchairs	Alexandria University
		October University for Modern Science & Arts
GP2021.R16.40	Intelligent Weather Prediction System Based on NB-IoT	(MSA)
	Intelligent Ubiquitous Chatbot for COVID-19 Assistance Based	
GP2021.R16.41	on Artificial Intelligence	Nile University
	Implementing a Healthcare Robot that Measures and records	
	vital signs for in-patients to reduce direct contact between	
GP2021.R16.42	nurses and patients	Cairo University

	Low-Cost System for Remote Early Assessment of Coronary	I
	Atherosclerosis using Artificial Intelligence and Cloud	
GP2021.R16.43	Computing	Cairo University
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GP2021.R16.44	Treatment of Sleep Apnea and Covid-19 using CPAP	Minia University
	Generating green energy from fast moving Trains using novel	
GP2021.R16.45	wind turbines	Nile University
	Electronic medical record with drug-drug interactions for	
GP2021.R16.46	clinical decision support system	Cairo Univeristy
	Design and implementation of a microcontrolled hydraulic	
GP2021.R16.47	prosthetic knee	Ain Shams University
GP2021.R16.48	Smart Farmer	Menofia University
	Roshetta : A mobile application for an OCR system to read	
GP2021.R16.49	medical prescriptions using deep learning techniques	Alexandria University
GP2021.R16.51	IoT Based Smart Campus	Ain Shams University
000004 046 55	Building a Robot Arm to Automate The Process of Patient Care	
GP2021.R16.55	"Measuring Vital Signs" During Coronavirus Pandemic	Cairo University
		Egyptian Academy for Engineering and
GP2021.R16.56	low cost , energy efficient electric car	Advanced Technology
GF 2021.N10.30	Generating Music Based on a Given Sentiment Using Deep	Advanced recimology
GP2021.R16.57	Learning	Alexandria university
GP2021.R16.58	5G FPGA based Test-Bed	Al-azhar University
GF2021.N10.36	JG FFGA based Test-bed	Al-azilai Olliversity
GP2021.R16.59	FPGA based neural network accelerator for smart farming	The British University in Egypt
	Design and Development of an Integrated System for Autism	
GP2021.R16.63	Spectrum Classification and interactive treatment remotely	Minia University
GP2021.R16.65	Self-Charging Electric Vehicles:	The British University in Egypt (BUE)
GP2021.R16.68	Smart bed modules	Ain shams university

GP2021.R16.69	Robot rehabilitation for the lower extremity	Minia University
GP2021.R16.71	Biometric Person Authentication Using Brain Signals	Cairo University
GP2021.R16.72	Smart Faculty	Benha University
GP2021.R16.73	AI-Based Domestic Robot to Serve in Isolation Hospitals	Nile University
	Weeding, Soil Plowing, and Cultivating Crops using Artificial	
GP2021.R16.75	Intelligence and Image Processing	Nile University
GP2021.R16.77	RoboCab	Cairo University
GP2021.R16.80	Emergency ICU Grade Mechanical Ventilator	The American University in Cairo
GP2021.R16.81	Underwater Object Detection and tracking	Ain Shams University
GP2021.R16.83	Intelligent Monitoring System for Precision Agriculture	The American University in Cairo
		University of science and technology at Zewail
GP2021.R16.85	Micro-fabricated_Microfluidic_Pump	city
GP2021.R16.88	Autonomous Underwater Vehicle Navigation	Ain Shams University
GP2021.R16.89	Wearable Drug Delivery Device for COVID-19 Patients	American University in Cairo
GP2021.R16.90	Tarabeza-Restaurant reservation app	Cairo University
	Predicting B-cell conformational epitope regions using deep	University of Science and Technology in
GP2021.R16.91	learning and sequence information	Zewail City
GP2021.R16.92	Automated Report Generation In Mammography	Cairo University
CD2021 D1C 02	CaCafa Dand Defeate Detection and Classification	Caina University
GP2021.R16.93	GoSafe - Road Defects Detection and Classification	Cairo University
GP2021.R16.94	Smart vertical parking system with IOT and Mobile app	Cairo University
Ur 2021.N10.94	Smart vertical parking system with 101 and Mobile app	Call O Offiversity
GP2021.R16.95	Biomix	Mansoura University
GP2021.R16.96	PCR (polymerase chain reaction)	Mansoura University
	E-Quarantine: IOT Smart Health System For Monitoring COVID-	
GP2021.R16.97	19 Patients Remotely	Minia University

	Mock-it: A Presentation Skills Assessment and Feedback	
GP2021.R16.98	Online Platform	Arab Academy for Science and Technology
GP2021.R16.99	3D Construction Printer	Canadian International College
GP2021.R16.102	Swarm 3D printing robots	Ain Shams University
GP2021.R16.103	Lighting the dark	Ain Shams University
GP2021.R16.104	IoT Based Smart Parking System	6 October University
GP2021.R16.105	Autonoumous Car Using End to End Learning	Alexandria University
	Smart Vision-Based Motion Tracking Mobile App for Low	
GP2021.R16.106	Frequency Displacement Measurements	Ain Shams University
		Arab Academy For Science and Technology
GP2021.R16.107	Lower Limb Exoskeleton	and Maritime
GP2021.R16.108	Mind-Controlled Wheelchair	Assiut University
GP2021.R16.113	Secure Identity Authentication Card (SIAC).	Ain Shams University
	Design and Implementation of Energy Harvesting System for	
GP2021.R16.114	Medical Wearable Sensor Nodes	Ain Shams University
GP2021.R16.115	Ghost Writer II	Cairo University
	Development and implementation of an on-board charger for	
GP2021.R16.116	plug-in hybrid electric vehicle	Aswan University
GP2021.R16.117	ICHMS_Intelligent Crop Health Monitoring System	Egyptian E-Learning University
GP2021.R16.118	Real-time monitoring scheme for automotive safety	The British University in Egypt
GP2021.R16.119	Safety and security system using FOTA and IoT	Minia university
GP2021.R16.120	Design of Smart Farm Prototype Based on Artificial Intelligence (AI Farm)	Arab Academy For Science, Technology & Maritime Transport
GP2021.R16.124	2D Signal Detector	British University in Egypt
C. 2021(10.124	25 Signal Detector	Egypt Japan University of Science and
GP2021.R16.125	Smart Wearable Monitoring and Diagnosing eHealth System	Technology (EJUST)
GP2021.R16.129	Establishing an applied educational kit for smart cities	Minia University

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Surveillance Camera System using Machine Learning Methods	Alexandria University
	Zewail City, University of Science and
Transcriptome Analysis for Neurodegenerative Disorders	Technology
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Autonomous Shuttle Bus: Path Planning and Control	MSA university
BCI for a Real Time Application to Classify Motor Commands [2]	The American University in Cairo
Abnormal Event Detection	Zewail city of science and technology
SAMS (Smart Attendance Management System)	Menofia university
	Arab Academy for Science, Technology and
A Communication System for Electric Vehicles (CSEV)	Maritime Transport
Detecting In - Vehicle Violence using Machine Learning	The American University in Cairo
Face Mask Detection System-Covid (SRS)	The Egyptian e-Learning University
Ri-lateral control of medical robotic arm using internet of	
	Arab academy for science and technology
Tobotic trinigo (tott) and virtual reality (viv)	Egypt-Japan University of Science and
Optical communications for Underwater IoT	Technology
·	Future university in Egypt (FUE)
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My Doctor	Menoufia University
An IoT based wearable medical monitoring device for	
healthcare application	Assiut University
	Transcriptome Analysis for Neurodegenerative Disorders  Autonomous Shuttle Bus: Path Planning and Control  BCI for a Real Time Application to Classify Motor Commands Abnormal Event Detection  SAMS (Smart Attendance Management System)  A Communication System for Electric Vehicles (CSEV)  Detecting In - Vehicle Violence using Machine Learning  Face Mask Detection System-Covid (SRS)  Bi-lateral control of medical robotic arm using internet of robotic things (IORT) and virtual reality (VR)  Optical communications for Underwater IoT  Driver support  My Doctor  An IoT based wearable medical monitoring device for