

Pre-proposals Seeking Industrial Partner

ID	Pre-proposal Title	Year of Submission	Applicant Category	About the project
PPA#2	Automatic fruit grading machine based on computer vision recognition system	2013	Academia	Design and implement a new fruit grading system based on machine vision.
PPA#3	Optical Receiver For High Speed Communications Over Plastic	2013	Academia	Design and implement an integrated optical receiver achieving 1.25Gb/s over 50m SI-POF with low power consumption, low bit error rate and enough optical power margin.
PPA#4	Experimental characterization of ground-to-train link in order to optimize	2013	Academia	Color-correction system (daltonization) to help subjects distinguish similar colors. Both diagnosis and correction system will be implemented for computer screens, mobile cameras and intelligent glasses.
PPA#5	SceNS: A Scene Narration System to Assist Blind People	2013	Academia	a prototype of a non-invasive scene narration artificial vision system.
PPA#8	An Efficient Online Arabic Handwriting OCR System for Mobile Computing	2013	Academia	An efficient online Arabic handwriting recognition system for mobile computing
PPA#9	Quantum Communication Networks	2013	Academia	Developing an accelerated entangled quantum communication network.
PPA#12	2DGelAC: A GPU-accelerated Software Tool for 2D Gel Image Analysis and Comparison	2013	Academia	This proposal exposes the ICT industry partner to state-of-the-art technologies in building efficient and accurate bioinformatics tools including, image analysis, image segmentation, high-performance computing, and general-purpose GPU computing
PPA#14	Automatic Query Answering For Farmers In Egypt	2013	Academia	The proposal goal is to apply mining techniques on these computerized farmers' problems to support farmers in different regions of the country. The suggested project aim to apply mining techniques on the unstructured description of the computerized farmers' problems, categorizing them, discovering the key concepts of the new problems, and then uses the categorization and concepts discovery in suggesting a solution for new problems without having to return to a specialist.
PPA#16	Nano-Composite Anode for High Performance Li-Ion Batteries	2014	Academia	This project aims to deliver half-cell and full battery using our patented anode technology as a prototype. We will perform performance characterization including: Voltametric analysis, electrochemical impedance spectroscopy and cyclic testing. The Cu nanowires will be also delivered as a platform for this technology and other suitable technologies.
PPA#18	Synthesis and characterization of Graphene and CNT for FET Applications	2014	Academia	This project aims to synthesize CNT and graphene for applications like FET and Transparent Conductive Electrodes (TCE).

PPA#20	Securing Wireless local area network	2014	Academia	For the theoretic field: it will be a new approach in the WLAN security field. For the practical field: it will offer an idea for a software application that can be easily implemented on WLAN.
PPA#21	Design, Development, and Implementation of a Millimetre Wave Antenna Array Beamforming System for 5G Mobile Communications	2014	Academia	Development of an efficient, simple, reliable and flexible mmWave BF prototype by exploiting the benefits of both analog and digital beamforming which is recently called hybrid beamforming techniques.
PPA#22	Prototyping Millimeter-wave Antennas for Homeland Security Detection and Imaging Applications	2014	Academia	This proposed research project addresses challenges associated with the design and implementation of mm-wave antennas and how their performance can be measured, assessed and improved. The main goal is to design, implement and evaluate mm-wave antenna candidates for use in mm-wave imaging systems for potential use in homeland security applications.
PPA#23	Design and Implementation of Graphene/ Carbon Nanotubes Metamaterial Antennas	2014	Academia	This project aims to develop an efficient, low cost, compact size and flexible metamaterial antennas based on grapheme and carbon nanotubes prototype which is recently designed.
PPA#24	Musical Vision	2014	Academia	This project focuses on Acquired Visual Impaired (blind) Peoples (AVIPs). The aim of this project to enable visual impaired persons especially AVIPs to realize (see) graphical information like colors, shapes, texture and 3D scenes. The outcome of this project will be a prototype for an intelligent system implemented in a glove like device enabling blind users to see what they are touching by both vibration and audio effects.
PPA#26	Originality Analyzer for Arabic Text		Academia	Software tool to estimate the originality of Arabic text-based documents. This proof-of-concept is expected to support better understanding of different linguistic patterns in committing plagiarism. Therefore, it is not only capable of detecting literal plagiarism, but also detecting intelligent plagiarism. The originality value of an examined document is estimated by computing the distance between each sentence in the text and the closest sentence in the suspected file(s).
PPA#27	Knowledge Transfer: A Scientific Oriented System	2015	Academia	The project should build a statistical machine translation system from English to Arabic for scientific domain.
PPA#28	CareU	2015	Academia	The project plan is providing accurate and trusted information of all infected people in Egypt using Internet of Things (IoT), hyper application and big data technology to detect diseases early and monitoring healthy. Also, the sytem developed will becollecting simultaneously detailed care data about the selected patients based on the analytics results, and gathering all environmental causes related to this disease.

Pre-proposals Matched with Industrial Partner

ID	Pre-proposal Title		Applicant Category	About the project
PPA#1	Point to Multi-point Digital Satellite Network Design	2013	Academia	Designing and building an efficient, low cost satellite communication modem and network including hardware and software.
PPA#7	Human Agent Interaction-A Prototype for Health Care Agent	2013	Academia	Developing a health-care intelligent agent capable of interacting with patients.
PPA#10	Real Time System for Education and Communication for Disabled	2013	Academia	A new prototype combining the lip reading element and sign language element in one environment.
PPA#15	Low Power RF Transceiver for Medical Applications	2013	Academia	The project goal is to develop a low power RF transceiver suitable for medical and health care applications based on a previously proposed architecture by the PI, which promised considerable power reductions.
PPA#17	Carbon nanotube and Graphene based flexible electronics	2014	Academia	This project aims to deliver a prototype of flexible transparent electrode that is suitable to be integrated with flexible electronic devices such as light emitting diodes (LED), and flexible solar cells. Working with a potential Industrial partner in handling, manipulating and processing of Nano-scaled materials to develop flexible electronic components such as field effect transistor, capacitors, interconnects ... etc.
PPA#25	Social Media Analytics	2015	Academia	Build a system that extracts the most discussed topics (or keywords) from an Arabic language data stream (e.g. a Twitter feed) and analyze the subjectivity of the individual posts and finally analyze the sentiment polarity (positive or negative) for subjective comments.