



IGNITE

Informative Gazette Nested by Iste Tkmce for Enrichment

VECTOR

Vector, a startup by M S Ali, Muhammed Salmun S, Amal Udayakumar and Mohammad Sajith A of TKMCE, is an initiative that has a very unique way of going. The high expense of PCB boards itself is the main motivation behind the startup. The fact that the cost of all the individual components of the PCB being 2 or 3 times lesser than the actual price of the PCB made the idea strike their minds. Brainstorming with friends of similar ideologies and passion towards this rose vector to the occasion. Vector aims at making the advanced sky high technologies accessible as the regularly using gadgets. The present accomplishments of Vector include Lithium ion battery, burglar alarms etc.

During the journey they came across many challenges like transportation expense of PCB, limitations of resources etc. Also the prototype production was strenuous and was hard to create the initial design. But the support from IEDC TKMCE and college faculties, especially the guidance of Dr Muhammed Shanir P P were substantial in the upcoming of vector. A major obstacle which vector faces now is the lack of expected market around. However, their future plans are to build a proper marketing strategy and mass production of commodities by overcoming these hurdles and to let the world know Vector.



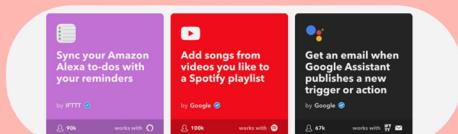
APPLE SEARCH ENGINE

Apple has accelerated work to develop its own search engine that would allow the iPhone maker to offer an alternative to Google. The signs of the search engine technology have begun to appear in its iOS 14 operating system. As part of the lawsuit, the Department of Justice noted that Google pays Apple billions of dollars to be the principal search engine on iOS devices.

ENTIRE STATE OF SOUTH AUSTRALIA POWERED SOLELY BY SOLAR IN A WORLD FIRST

South Australia marks the world debut in meeting all its energy needs purely from solar power for an hour between midday and 1pm. Clear skies and mild temperatures on the day made the conditions favourable for the rooftop solar system accounting for the major output. Solar power is very popular in South Australia, where one in every three houses are equipped with rooftop solar panels. This switching to a sustainable energy source in South Australia symbolises the rebuilding of jurisdictional power systems in Australia. Previously the state had met 89 percent of its energy needs from solar, but now it has reached the pinnacle point. Presently, 288,000 installed rooftop systems along with large scale solar facilities contributed to this achievement. But as per Australian Energy Market Operators (AEMO), additional 36,000 new rooftop solar systems are to be fixed in the next 14 months, which estimates that South Australia's grid will see zero demand as rooftop solar panels alone will be capable of meeting 100 percent of the energy demands.

IFTTT



If This Then That (commonly known as IFTTT) is a web-based service that allows users to create chains of conditional statements triggered by changes that occur

within other web services such as Gmail, Facebook, Telegram, Instagram, or Pinterest. The service is offered in freeware, subscription, and enterprise versions. In addition to the web-based application, the service runs on iOS and Android.

EFFICIENCY CHANGE OF CONTROL SURFACE OF A BIOMIMETIC WING MORPHING UAV

The paper focuses on studying the influence of biomimetic morphing on roll efficiency of redundant control surfaces of a biomimetic wing UAV from the perspective of the change of aerodynamic, system convergence time and aerodynamic energy consumption. Among different types of aerial vehicles, UAV is treated as the most suitable for applying morphing technology because of the lower aerodynamic load on wings.

Variation modes of avian wings provides large-scale morphing aircraft which is an efficient technique for solving problems such as the mass center shift in longitudinal trim and control system design during the morphing process. The paper is highlighted with a numerical method for fully understanding the influence of combined morphing on roll efficiency of a biomimetic wing unmanned aerial vehicle (UAV). By identifying the wing shape of raptor size birds, a two-joint wing that with asymmetric sweep angle change and Flex-TE deflection as the system's redundant lateral control inputs is firstly designed. The coordinate change laws of the sweep angle of both wing parts are determined under constant CM constraints for mimicking the change of avian wing in the mission-switch process.

OPEN AI



OpenAI's new model – GPT-3 (Generative Pretrained Transformer -3) a astounding-sure-to-knock-your-mind-off-the-rocks model that'll probably keep you glued to your seats. OpenAI's new GPT-3 model is a language algorithm that basically uses AI and all that machine learning stuff out there to convert words or data in other forms to produce an original output – be it codes, images, or whatever you'd like to generate. It all comes down to what you want and how you make use of this algorithm. Simply put, it can create wonders. It isn't specifically designed to do a particular task. GPT-3, if used in a way it's intended to use, can turn the tables, shift rocks and blow your mind – more than the season 3 of Dark did. The reason why the community is going crazy over GPT-3 is because of how advanced the model is compared to its predecessor. The latest model is OpenAI's all-time largest trained one and the GPT-3 demos on twitter prove the same. Researchers, while training the model, claim that the larger the model is, the greater the efficient use of the in-context information. The latest advancements in the machine learning department have made it easy for GPT-3 to process data in seconds and generate results that you thought weren't possible. Machine learning is set to rule the world, and with some GPT-3 demos, the word 'impossible' might soon be taken out from the tech-dictionary. The GPT-3 model is a knight in shining armor to the AI world, and it's turning the tables and shooting for the stars as we speak.