BYTE QUEST

Vasavi College of Engineering

Department of Computer Science and Engineering

September 14, 2020
Volume 85

Contents:

Byte Quest is the article published by the CSE dept of Vasavi College of Engineering regarding the latest innovative Technologies and Software that have been emerged in the competitive world. The motto of this article is to update the people regarding the improvement in technology. The article is designed by the active participation of students under the guidance of faculty coordinators.

Good, bad or indifferent if you are not investing in new technology, you are going to be left behind.
-Philip Green

Once a new technology rolls over you, if you're not part of the steamroller, you're part of the road.
-Stewart Brand

FACULTY CO-ORDINATORS

S. KOMAL KAUR (ASST. PROFESSOR)

C. GIREESH(ASST. PROFESSOR)

STUDENT COORDINATORS

CAROL (4/4 CSE-A) D.APARNA (4/4 CSE-A)

R. ABHINAV (3/4 CSE-A) K. ANISHA (3/4 CSE-A)

IMRAN MIRZA (2/4 CSE-A) AKASH VORA (2/4 CSE-A) NISCHALA (2/4 CSE-B)

UNHACKABLE INTERNET

Ironically, the only part of the Internet that is secure today is the Dark Net, where hackers encrypt traffic, hide their identities, buy/sell stolen secrets, and even chit-chat about how to pull-off the latest scams. Public Internet traffic, on the other hand, is (by default) unencrypted.

Researchers claim to have uncovered the "missing link" towards a un-hack-able quantum Internet that one-ups the security of the Dark Net. By correcting for the signal loss in today's quantum key distribution, these researchers have demonstrated a prototype quantum repeater that allows the long-distance transmission necessary for a un- hack-able quantum Internet. Nearly $625 million in federal funding is expected to be allocated to the project. A quantum internet would be able to transmit large volumes of data across immense distances at a rate that exceeds the speed of light. The system relies on entangled particles and a fiber optic network.

Imran Mirza (CSE-A 2/4)

INTELLIGENT APPS

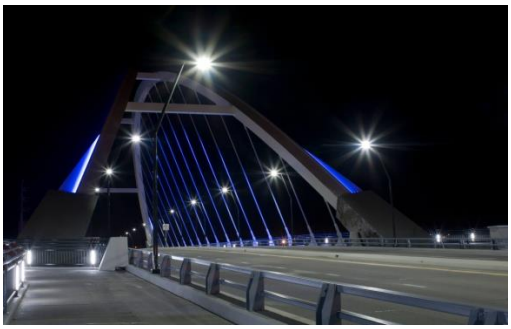
Intelligent Apps are the application which acquires real-time and historical data from user interactions and other sources in order to provide suggestions and make predictions. It offers personalized and adaptive user experiences; data analytics and machine learning are the core components of intelligent apps. After apprehend, the users' needs, these apps deliver contextual and relevant information as well as appraise the users about upcoming issues before they arise. With the assistance of a high degree of predictive analysis, intelligent apps forebode the users' behavior to make information available easily. Artificial intelligence is used in developing an intelligent application that is much sophisticated by having algorithms; it automates how much tasks to be performed.

Those days have gone when employees were gratified with simple mobile-enabled access to key business applications and data. Today's digital natives demand much more than this, they anticipate intelligent user experience and highly useable as offered by consumer apps. And, intelligent apps assure to provide the same. In addition, IA aids employees to accomplish their work in a different manner, In future nearby, corporations will continue to use their legacy tools or systems to find out to leverage IA to extend their business operations or processes. For instance — simple applications i.e. emails couldn't go away completely; in this sense, organizations can develop intelligent apps with the feature to alert employees about emails who urges quick actions.

The overall objective of intelligent apps is to work in harmony with extant tools and render more targeted and personalized information; it leads employees' will be able to increase quality and output in their job.

Imran Mirza (CSE-A 2/4)

SMART STREET LIGHT AUTOMATION (IoT application)



Smart Street light automation is a project using IOT. The main idea of this project is conservation of energy by reducing electricity wastage as well as to reduce the manpower. Street lights are a mandatory community service requiring significant public energy resources. Understanding the need to optimize power consumption without compromising citizen safety. Smart street light Automation using ESP8266, LDR Sensor, Relay Module. Light Remains off During Day Time. Glow at low intensity after Sunset.
The opportunities that cities can seize with the installation of smart lighting solutions go far beyond value creation through energy (cost) and maintenance savings (which are huge considering that as much as 40 percent of a city's energy budget is consumed by street lighting and new efficient lighting can save up to 50% of these costs as a result of increased energy efficiency) or the improvement of the environmental impact.
A wide range of leading smart cities has already taken advantage of the benefits that smart lighting solutions offer.

Smart lighting solutions using networked technology represent an interesting opportunity for cities or communities that want to get smarter. The key benefits are:

- huge reduction of energy and maintenance cost
- increased public safety from improved lighting
- safer traffic due to increased visibility of hazards

V. Sree Siva Naga Surya Prakash (CSE-A 2/4)