



## BYTE QUEST

Vasavi College of Engineering

Department of Computer Science and Engineering

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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

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## OCULUS-RIFT



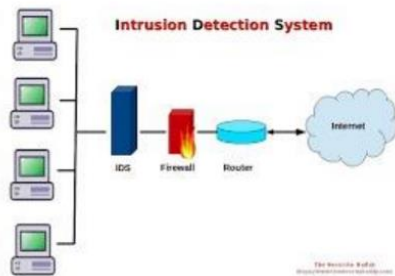
Virtual Reality gaming is here in the form of Oculus Rift. This history-defining 3D headset lets you mentally feel that you are actually inside a video game. In the Rift's virtual world, you could turn your head around with ultra-low latency to view the world in a high-resolution display.

There are premium products in the market that can do the same, but Rift wants you to enjoy the experience at only \$300, and the package even comes as a development kit. This is the beginning of the revolution for next-generation gaming.

The timing is perfect as the world is currently bombarded with the virtual reality topic that could also be attributed to Sword Art Online, the anime series featuring the characters playing games in an entirely virtual world. While we're getting there, it could take a few more years to reach that level of realism. Oculus Rift is our first step.

VISHNU (CSE-B 2/4)

## INTRUSION DETECTION SYSTEMS



Some systems may attempt to stop an intrusion attempt but this is neither required nor expected of a monitoring system. Intrusion detection and prevention systems (IDPS) are primarily focused on identifying possible incidents, logging information about them, and reporting attempts. In addition, organizations use IDPS for other purposes, such as identifying problems with security policies, documenting existing threats and deterring individuals from violating security

policies. IDPS have become a necessary addition to the security infrastructure of nearly every organization. IDPS typically record information related to observed events, notify security administrators of important observed events and produce reports. Many IDPS can also respond to a detected threat by attempting to prevent it from succeeding. They use several response techniques, which involve the IDPS stopping the attack itself, changing the security environment (e.g. reconfiguring a firewall) or changing the attack's content.

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## MATERIAL'S QUANTUM LEAP



Quantum mechanics is a very emerging field of physics. Each and every day scientists are observing, manipulating and controlling behaviours of particles at an atomic and subatomic scale to generate advanced next-generation technologies for computing, communicating, sensing, and modelling. Many of recent progresses in laser, GPS, LED, and computer technologies rely on interaction of energy and substance at exceptionally small and distinct dimensions.

This all lead to a great quantum revolution in the history of quantum mechanics. Very soon, quantum computing will be a reality paving the way towards innovation of supercomputers with a huge increase in speed and power as well as problem solving methods. This will open the door of some dramatic innovation in man associated industries.

Another great possibility of such a quantum movement is that it will precisely simulate much larger and far interesting molecules as researchers form machines with more Qubits, and very significantly, better algorithm



However, scientists are just on the verge of the beginning. With each phase passing, they are moving towards the revolution in quantum physics that will make the technology an all new reality with a dream.

We are hopeful about the future success. researchers will have to focus on four primary goals: Develop a quantum computer with a sufficiently large number of quantum bits (qubits) to solve a challenging calculation. Ensure that every qubit interacts with all other qubits in the system, critical for solving fundamental problems in physics. Integrate software, algorithms, devices and systems engineering. Involve equal input from experimentalists, theorists, engineers and computer scientists.

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