

COMPUTER VILLAGE

INSPIRED BY STL JOBS CLINTON PEABODY

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IoT and Farming



Ask yourself the question how is the Internet of Things and Farming connected? Hey the internet is about programs, the web and computers while farming is acreage and plants and farm equipment, right? Imagine being able to combine the internet, compilation of data, productivity, higher yield of produce with less impact on the environment. Welcome to vertical farming.

In a nutshell vertical farming is:

The practice of producing food and medicine in vertically stacked layers, vertically inclined surfaces and/or integrated in other structures (such as in a skyscraper, used warehouse, or shipping container).

For our comparison we will use a warehouse verses the traditional farm. The average warehouse is 50,000 sq. feet or 1.15 acres, the average Tradition farm acre is 43,560 sq. feet (1 acre) about 30 acres of land. The pros and cons of Vertical Farming verses Tradition Farming are:

Tradition Farming

Crop Rotation 3 Times a Year
Uses Pesticides and Herbicides
Needs Elements of Nature
Sunlight, Dirt

Vertical Farming

Crop Rotation Up To 22 Times A Year
0 Pesticides and Herbicides
Led Lighting (Sun)
0 Soil

Constant Irrigation
33% of green food waste due to transfer

95% less Water Consumption
less waste due to local access
Controlled environment
Utilization of space, stacked opposed to flat
Complete control of growth
Reduced environment
Cost saving
Software and technology for better product

Imaging this getting a warehouse in the heart of the city and using vertical farming to create a modern era victory garden that produces fresh vegetable's all year long opposed to seasonal, and at nominal costs to the consuming public. The learning opportunities for young and old alike:

- Science projects inclusive of:
 - Programing (data collection, Python)
 - Biology
 - Computer science
- Development of vacant buildings
 - Reducing depreciation
- Cooperative of neighborhoods
 - Food banks and pantries would have a constant cost effective access to fresh produce

Want to know more about IoT and vertical farming follow the links below:

By Valcenteu - Own work, CC BY-SA 3.0,

<https://commons.wikimedia.org/w/index.php?curid=9387472>

This Farm of the Future Uses No Soil and 95% Less Water - YouTube

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=8&cad=rja&uact=8&ved=0ahUKEwin2PimsK_XAhVSziYKHQzdAewQtwlIVzAH&url=https%3A%2F%2Fwww.youtube.com%2Fwatch%3Fv%3D-_tvJtUHNmU&usg=AOvVaw2xbXCAVCBJ4Ybka-ibEzsY

Dell IQT

<https://www.delltechnologies.com/en-us/iqt-day/index.htm>



Computer Village Executive Director, Don Holt

“Don continues to stress the importance of IoT and 2 of the components for the growth of young people associated with job stability in our community. Below is an overview of 2 articles with the links to the entire article(s).

WHY COMPUTER TRAINING FOR THE YOUNG IS MORE IMPORTANT NOW THAN EVER IN THE HISTORY OF THE WORLD – 2017

- **IOT INTERNET OF THINGS (SOME CALL IT....INTERNET OF EVERYTHING)***
 - Bigger than the Industrial Revolution
 - Projected to add 50 to 70 billion new devices to the internet from year 2020 to 2024
 - Projected to create a new **\$19 Trillion market** in the world
 - Effects every industry manufacturing, to medical to retail and more
 - The key to driver less cars and robots with sensors and actuators operate
 - It is what makes AI (Artificial Intelligence) work even better
 - The key to digital cities and digital countries
 - Seven (7) times bigger market value than computers, tablets and smart phones combined
 - IOT will usher in more new jobs and more new businesses that never existed before.
 - IBM has already invested \$3 Billion, Google \$3.2 Billion, Warren Buffet \$13 Billion and host of other governments and agencies around the world
- Biggest element in STEM or STEAM

***WHAT IS IOT “INTERNET OF THINGS”**

The Internet of Things (IoT) is a system of interrelated computing devices, mechanical and digital machines, objects, animals or people that are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction.

A unique identifier (UID) is a numeric or alphanumeric string that is associated with a single entity within a given system. UIDs make it possible to address that entity, so that it can be accessed and interacted with.

IOT effects virtually everything in the home, workplace, entertainment, sports and community.

Where the STEM Jobs Are (and Where They Aren't)

By [STEVE LOHR](#)

November 1, 2017

The New York Times

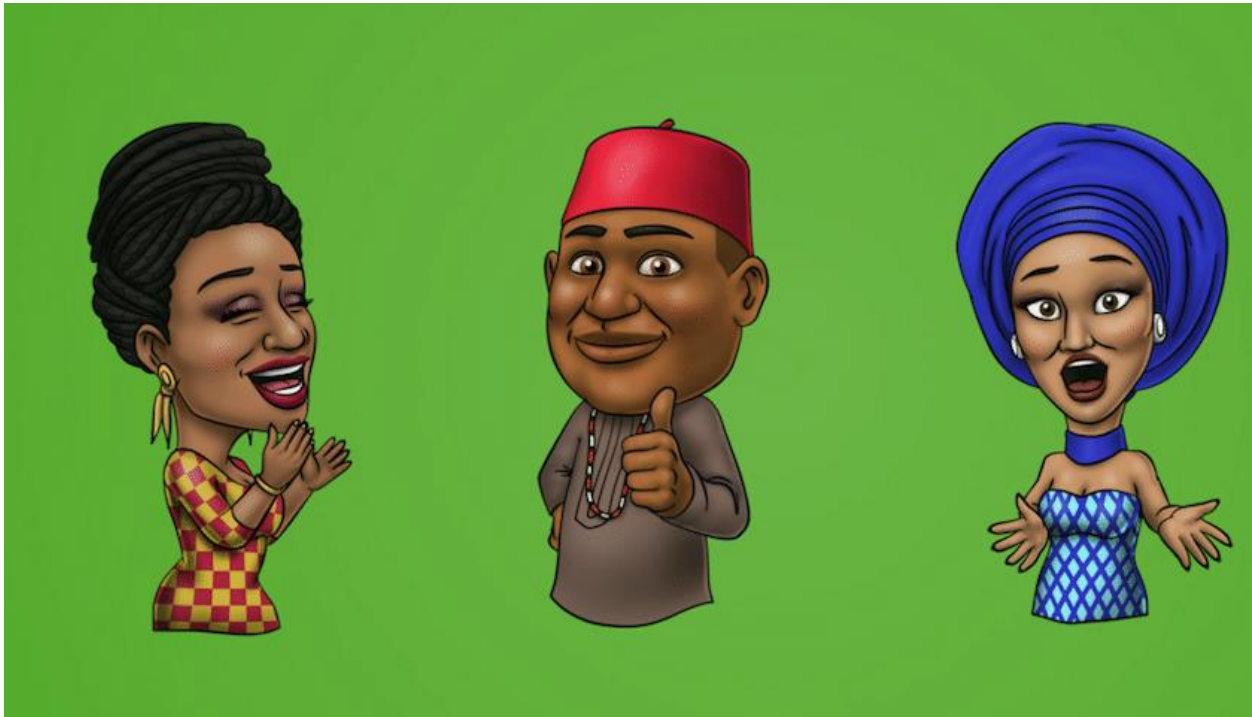
Computer Science is the top rated job available in the market today based on this article and here are the nuggets:

- What recent studies have made increasingly apparent is that the greatest number of high-paying STEM jobs is in the “T” (Technology, specifically, computing).
- Computer science topped the list (\$70,000)
- The top 10 jobs, last year were all computer skills, including expertise in cloud computing, data mining and statistical analysis, and writing smartphone applications.
- 73 percent of STEM job growth will be in computer occupations
- Computer science is the only STEM field where more than half of graduates are employed in their field.

To read the complete article follows the link below:

<https://www.nytimes.com/2017/11/01/education/edlife/stem=jobs-industry-careers.html>

Tech Highlight: AfroMoji-African Afro Emoticon Stickers Black



Emoticons are one of the most popular apps on Android and iPhone. They are great but lack that personal cultural connection. Not any more, Nigerian-American Ayoola Daramola saw the void for authentic images representing the African American market created these 50 characters in 300 different stickers.



Inventor Ayoola Daramola

These apps can be found on the Google Play (for free), for Android and iPhone. Some of the features include:

AfroMoji Features:

- ✓ It is totally free to use these black emoji's and emoticons
- ✓ One of the widest selections with emoticons for each situation in life
- ✓ You will always keep your AfroMoji's!
- ✓ It's quick and easy to share!
- ✓ Simple intuitive way to download and use
- ✓ You can use the African American emoji's unlimited!

* See more articles about Black Inventors at <https://urbangeekz.com>

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Web: <http://www.computervillage.org/index.html>

Facebook: <https://www.facebook.com/cvillagelouis/>

YouTube: <https://www.youtube.com/channel/UCn3uTiYe4Tf91Ug44WlVlKA>

Twitter: <https://twitter.com/CvillageStl>

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