

Summary

Organization Name, Address, Telephone Number and Website

Tech+Equation, Inc.

P. O. Box 2331

Merced, CA 95344-2331

Phone: 209-386-7340

Website: techequation.org

Year of Incorporation

Year incorporated: 2017

Name, Title, Phone Number and Email of Contact Person

Theo Crouch, II

Title: CEO

Phone: 760-607-2985

Email: theo.techequation@gmail.com

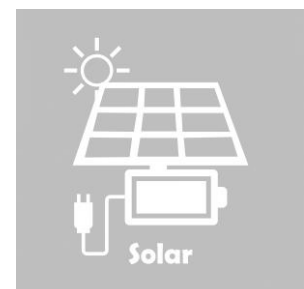
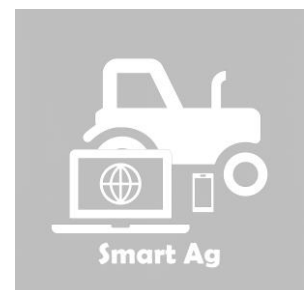
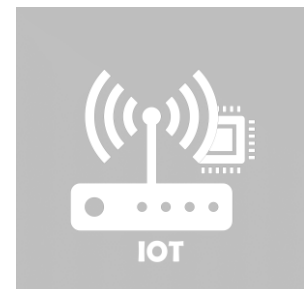
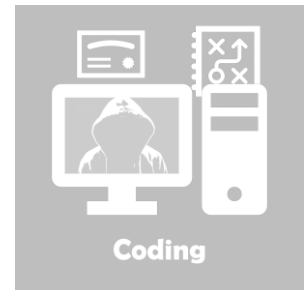
Name and Title of Person Authorized Point of Contact

Same as above

Name of Project

Project: Smart Farm Nexus: SmartBox

IRS 501(c)3 Number: 81-5119027



Ask about:

Smart Farm Nexus

Smart Farm Nexus

The *Smart Farm Nexus* is a partnership of businesses, communities and individuals. Beginning with a single smart farm *box* (or SmartBox), each *SmartBox* (or node) will start as a hydroponics system. These nodes will be located throughout the Central Valley of California through partnerships, from backyards to low use farms to orchards and groves. Each node is a self-sustained unit that is part of a bigger system. The system will be set up to produce an excess of food. As the system becomes a source of food, starting from a single crop, planning will commence to expand the system to its limits, growing a variety of foods.

One of the aims will be to also grow crop in a traditional fashion in the ground in as large a plot as is feasible about and near each node. Otherwise, the hydroponic system can be contained inside the *box* in perpetuity. This will iterate from location to location, indefinitely.

The Smart Farm Nexus will also be the starting point of after school programming to grow young minds by STEM + AG Technology teaching and outreach. Teaching from Step 1. To Step Completion. students will have the opportunity to learn various aspects of research along with learning carpentry skills and other skills, for example, hydroponics, electrical wiring, low voltage wiring, solar installation, networking (Cisco Net Academy), Wi-Fi and antenna installation/deploy, cyber security, IoT (data acquisition), microcomputers (Raspberry Pi), microprocessors (Arduino), programming (data science), robotics, rapid prototyping, to name a few, the list goes on.

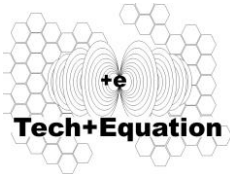
The nexus is the realization and implementation of sustainability and green technology. Through technology, instill and strengthen the desire to learn to reverse the effects of human activity on earth. The nexus is an amalgamation of ideas and technology for growing young minds for job-readiness in the new economy of globalization.

For the human race. One street at a time. Grow food anywhere on earth (or in the universe... NASA).

-- Theo

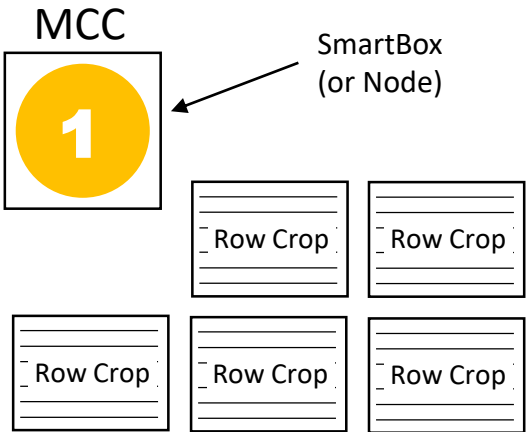
(MY) Food Production

Maximum Yield Food Production



SmartBox

Micro-system
Deploy and Manage



Residential Setup

Low-cost dirt only

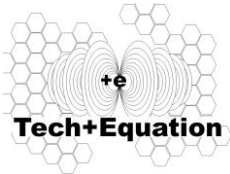
This system was deployed and maintained. This layout was developed before the *SmartBox* was conceptualized.

This is the “Row Crop”. The harvest was eaten. No pesticides. No fungicide. No herbicide. Organic and petroleum based fertilizers were used.



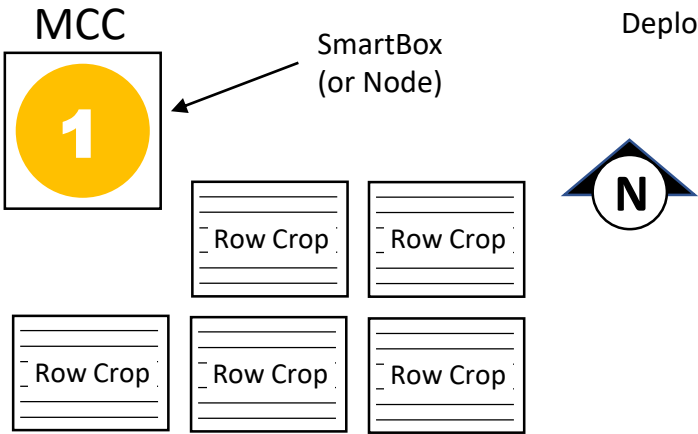
(MY) Food Production

Maximum Yield Food Production



SmartBox

Micro-system
Deploy and Manage

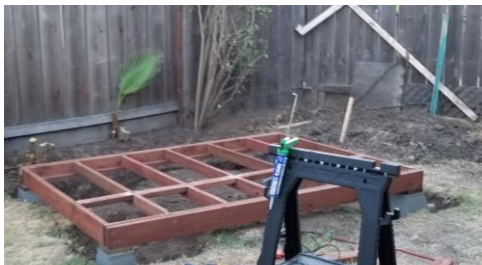


Residential SmartBox

6ft x 8ft Prototype

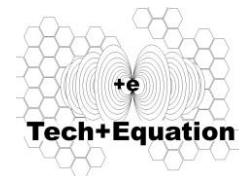
This system was deployed as a prototype (6ft x 8ft). The form factor of the production model will not have the solar panels overhanging as shown. Electrical wiring and battery installation will require professional training/assistance.

The *SmartBox* is not a permanent structure. It can be removed and relocated with the proper machinery.



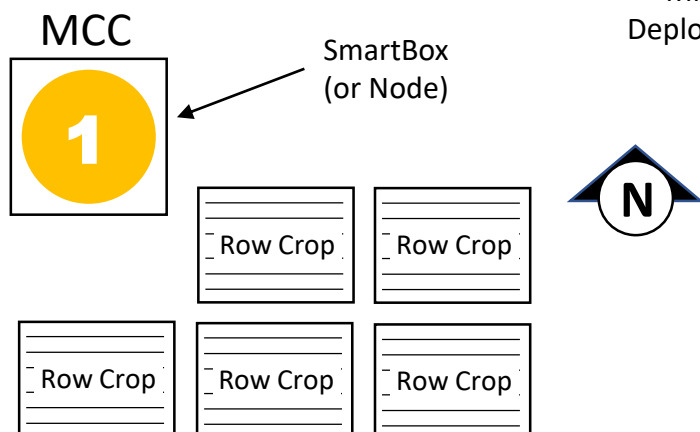
(MY) Food Production

Maximum Yield Food Production



SmartBox

Micro-system
Deploy and Manage



Boys and Girls Club

GardenX 2018, Positive Sprouts
K - 5

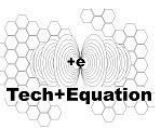
This system was deployed but not maintained. These are not *SmartBoxes*. These planters would have accounted for the "Row Crop", see diagram (left).

The original plan was to deploy a 5ft x 5ft *SmartBox* (a non-production model). No *SmartBox* was built for this site. No vegetables were harvested and eaten.



ACADEMY OF SCIENCE TECHNOLOGY ENGINEERING MATHEMATICS AND AGRICULTURE

The Smart Farm Nexus is a call for collaboration and community development. The development of safe zones and green spaces that illustrate planet-wise interventions. Sign your letter of collaboration (next page).



Silicon Valley EAST, which part are *you* building?

Ask about:

Smart Farm Nexus



To: Whom it may concern

From: _____

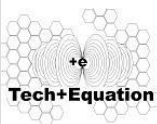
(Print name of the individual collaborator or name of the organization and name and position of the official submitting this memo)

By signing below (or transmitting electronically), I acknowledge that I am listed as a collaborator on this project, entitled "Smart Farm Nexus," with Theo Crouch, II as the Principal Investigator. I agree to _____ as described in the project description hereafter in a proposal, and I commit to provide or make available the resources specified therein.

Signed: _____

Organization: _____

Date: _____

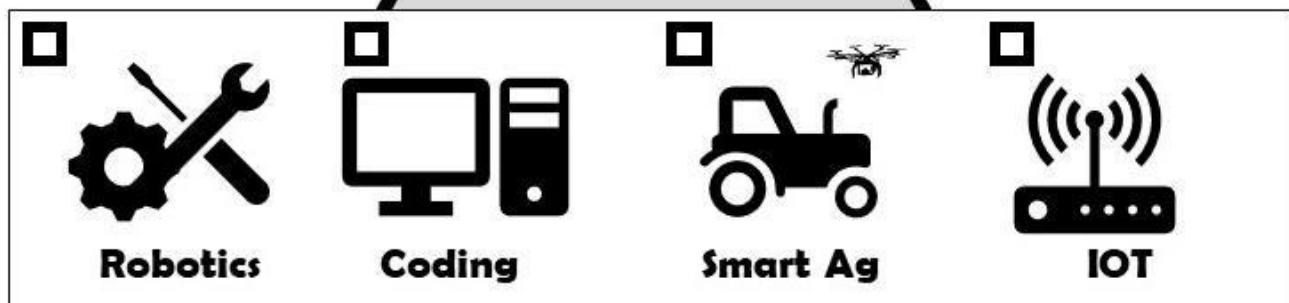


Silicon Valley EAST, which part are *you* building?

Ask about:

Smart Farm Nexus

Smart



Farm

Nexus

Where do you begin?

Silicon Valley EAST, which part are *you* building?