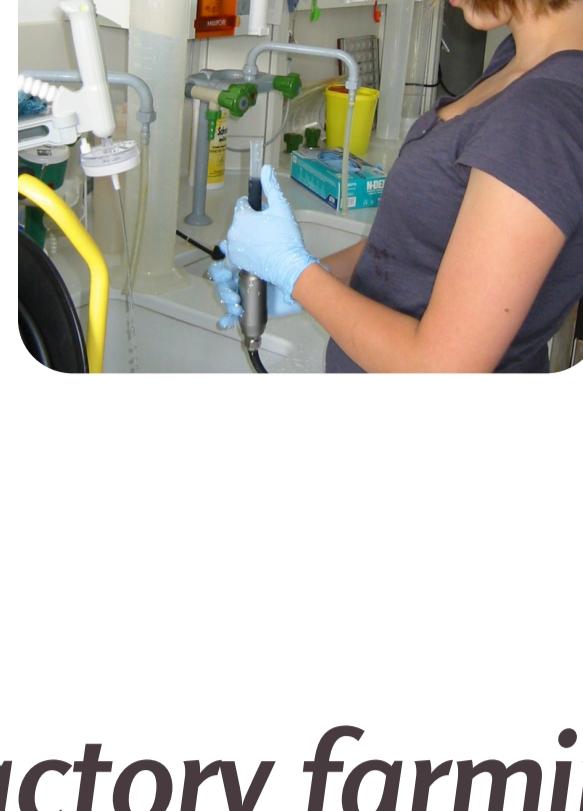
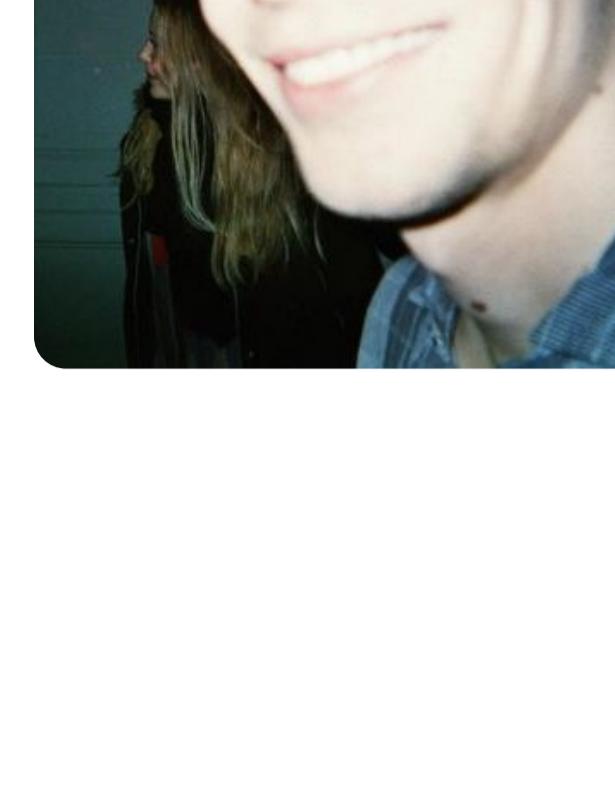


THE ROOT SYSTEM PROJECT

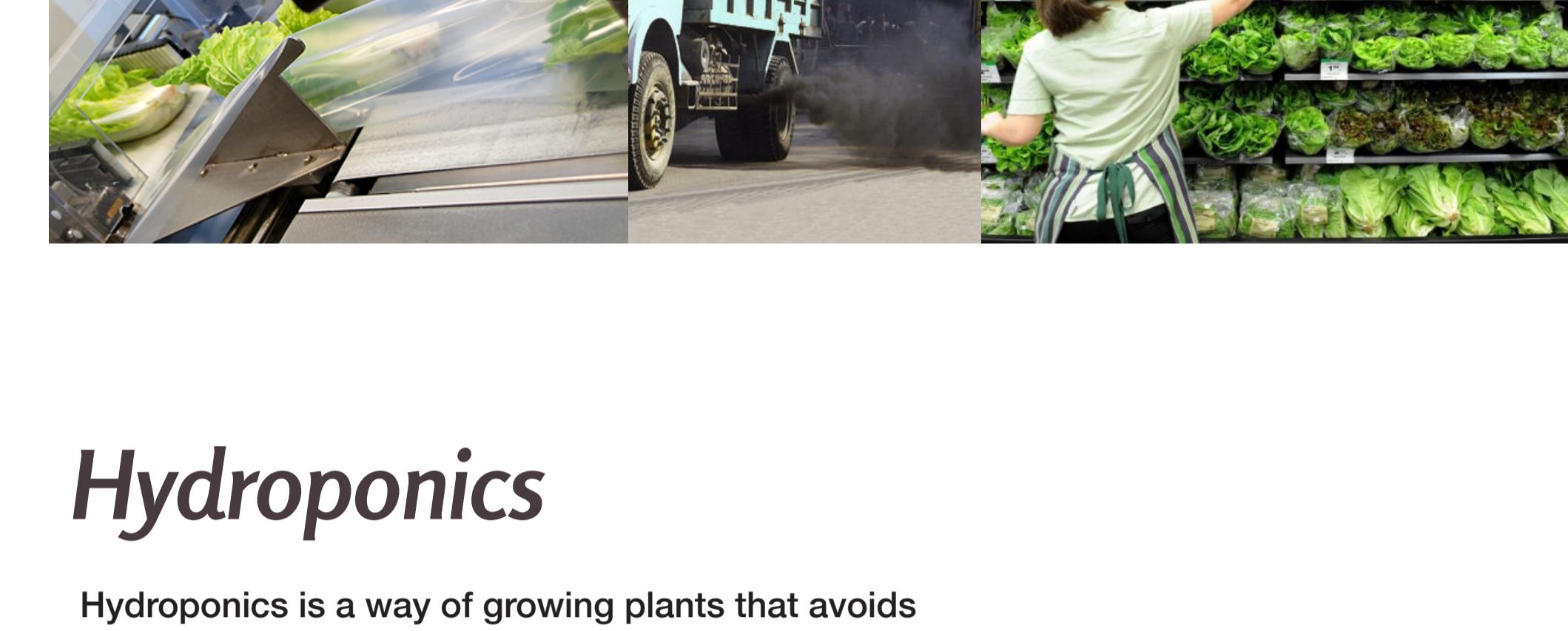


Hi, we are Karen and Louis. We like science, machine learning and strawberries. We want to build a product that makes hydroponics more accessible to people who want to grow their own food but don't have the space or time to invest. Both having grown up on a farm we want to show people how rewarding and exciting it can be to grow your own food. We will try to show what problems we are trying to solve and how we want to tell this story to our customers.



Factory farming

We believe that there is a lot of waste involved with factory farming and people have lost touch with the way their food is produced. Most don't stop and think about the countless people in the supply chain that handled your food, or sprayed with pesticides. Or the wasteful practice of packaging and shipping fruits and vegetables all over the place.



Hydroponics

Hydroponics is a way of growing plants that avoids soil and tailors the amount of nutrients a plant needs specifically to it. This is a much more efficient way of farming, one which many DIY enthusiasts have embraced and is also finding its way into the urban farming movement. Not only does it save 90% of the water traditional farming uses, the crops produce much higher yields.

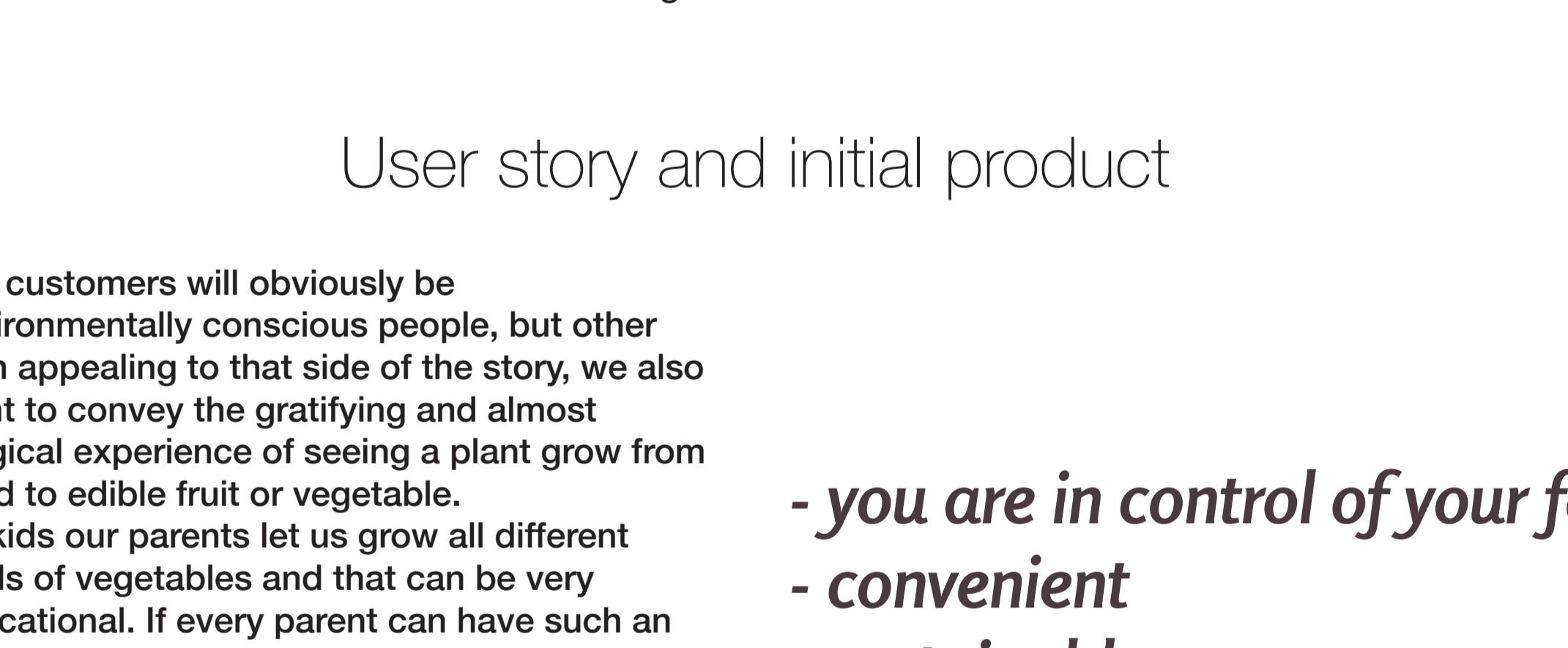
- resource efficient
- space efficient
- higher yields

The problem with hydroponics is the research and knowledge required to get started. There are quite a few variables involved that influence your results. This is a pity, since it can be the most hands off way of getting fresh fruit and vegetables. This stems from the fact the environment can be closely controlled and monitored.

The project

We want to remove this barrier from people who want to grow their own fresh fruit, vegetables or herbs. Perhaps right in their own kitchen.

We intend to do this by building smart, WiFi-connected hydroponics systems that monitor all necessary variables and control the environment appropriately.



Data collection and machine learning

The data we collect will help further the science of hydroponics. As we are getting a lot of data from a lot of different environments, we can start adjusting each individual environment to optimize plant growth.

User story and initial product

Our customers will obviously be environmentally conscious people, but other than appealing to that side of the story, we also want to convey the gratifying and almost magical experience of seeing a plant grow from seed to edible fruit or vegetable. As kids our parents let us grow all different kinds of vegetables and that can be very educational. If every parent can have such an experience right in there home, that would be amazing.

But mostly it is an appeal to convenience and food safety. After setup, these systems will be mostly autonomous until harvest time. You are in control of your food. You will know exactly who coughed on your food!

Our initial product will be a small system that can grow herbs and lettuce or strawberries.

- you are in control of your food
- convenient
- sustainable
- educational