

# Integrated Symbiotics Fall Internship: Undergrad UI and Database Intern

#### **About Us:**

Integrated Symbiotics, LLC (IS) is an Sustainable Engineering company focused on agricultural technology, with a focus in the field of aquaponics. IS aims to reduce the energy and water consumption required in traditional agriculture by mimicking natural behavior while combining new advances in automation and monitoring.

Integrated Symbiotics was formed in January of 2015 by Nicholas Renner, a Chemical Engineer, and Ferman Moody, a Sustainable Designer. IS was one of 150 teams accepted to the competition Makers Against Drought, sponsored by Samsung. This competition has a \$100k Grand Prize (and various sub-prizes) and we are eager to compete. We are looking for an intern to assist our lead UI developer with the front end and database portion of this controller.

#### Responsibilities:

- Work with team to develop aquaponic controller
- Coordinate with lead programmer to develop monitoring systems
  - o Be able to help design infrastructure and clearly communicate ideas
  - Help design user interface for monitoring systems
  - Be able to work independently and demonstrate advances made during that time
- Document code

#### Requirements:

Working proficiency with Python and SQL

### Preferred:

- Experience with a microcontroller such as Arduino
- Experience using Raspberry Pi
- Understanding and interest in basic Environmental Science, Chemistry, or Biology
- Enthusiasm for agriculture and/or aguaculture
- Experience using GitHub
- Some understanding of C languages

#### Term:

2015 Fall Term

## **Approximate Weekly Breakdown:**

8-10 hours: Independent work on UI and database

3 hours: Meeting with team for integration and brainstorming



# Compensation:

This is an unpaid internship.

We are currently a start-up where everyone is working on their own accord. The right applicant will be eligible for a portion of any prize money won, which will be negotiated at the beginning of the internship. In addition, we provide the experience of working with a ground level start up and the flexibility and fun that comes with that. Applicants will be written a top notch letter of recommendation for their efforts.