

# MATTHEW T JOHNSEN

112 Spring House Rd

Powell, TN

(865) 964-6204

[mjohnsen@biofrack.com](mailto:mjohnsen@biofrack.com)

## EDUCATION

**University of Tennessee** – Knoxville, TN

Bs in Video Production 2009 graduate

Bs in Biosystems Engineering 2019 graduate

## EXPERIENCE

**Soil Science Research Assistant** 2019 April – Dec.

Conducted and setup experiments related to soil moisture by programming and monitoring soil moisture probes and other environmental sensors for two projects:

“Biochar amendment effects on soil moisture curve and growth”

“Dispersion effects of irrigation nozzle orientation on soil moisture uptake”

The experiments used a Campbell Scientific data logging and control system with meter group sensors.

**Erosion Control Subcontractor Assistant** 2019 Summer

Analyzed Civil CAD projects submitted for government projects to extract billable materials and create quotes for project bids.

**Senior Design Project** 2018 – 2019

Designed a prototype device to inject biochar into soil subsurface to improve infiltration

Won 1<sup>st</sup> place in Gunlogson Environmental Design Competition

Continued project after graduation to co-found Biofrack, LLC

**Organic Agriculture Research Assistant** 2017-2018

Maintained research projects at UT extension organic farm (ETREC)

Helped with planting and worked under the direction of researchers who conducting field trials, allowing me to discuss experiment design and results informally with many different people.

**Viticulture Assistant for Easterly Scientific** 2015-2017

Assisted a retired ORNL researcher on a hobby wine farm cultivating Vinis vinifera on an American rootstock.