## Joshua **Grant**

## Data Engineer

#### contact

Knoxville, TN 37912
United States of America
+1 (865) 803 3495 □
jngrant9@gmail.com

notjustadatum.blogspot.com B
github.com/sempervent 
linkedin.com/in/joshuanagrant in

547 Murray Drive

### objective

to take theories, ideas, and experiments and turn them into production-scalable solutions

#### </> development

Bash:
Docker:
HTML:
JavaScript:

Late X:
Perl:
PHP:
Python:
R:
SQL:

#### **&** flavors

R:

tidyverse vegan testthat devtools DBI leaflet httr ggplot2 Python: pandas beautifulsoup PIL xdgboost rasterstats osgeo SQL/DB: MySQL PostgreSQL MongoDB Hadoop **SQLite** Snowflake LATEX: tikz fancyhdr tables booktabs JavaScript: node.js angular.js

data.table shiny

#### Experience

#### **Data Scientist Subcontractor**

Oak Ridge National Laboratory, Oak Ridge, TN 2018 — Present

- Automating data ingestion of the WSTAMP webapp via the use of R, Python, Airflow, and Docker
- Authoring an R package to unify geography between online data APIs

#### **Owner & Contractor-For-Hire**

Specrabella, Knoxville, TN 2018 —2018

- Designing, developing, and deploying an interactive energy informatics web application that provides real-time calculation from machine learning derived models
- Consulting with clients on ground-up web application architecture, database and visualization needs
- Developed data ingestion methods using cURL, PHP, and R to scrape energy data from the web
- Streamlined training and development procedures using ansible, vagrant, PHP, and BASH

# **Bioinformatician, Project Manager, & Technical Sales Representative** Microbial Insights, Knoxville, TN 2016—2018

- Established an automated pipeline using R, MySQL, Python, and Bash for NGS analysis, along with intranet website control written in JavaScript and Shiny
- Automated client-bound statistical calculations such as linear models, ANOVA, SOMs, clustering, PCA, and PCoA
- Developed an ETL customer data visualization tool using R, PHP, JQuery, and MySQL to view qPCR results in the context of other samples' and selected parameters
- Optimized data delivery to clients via a custom R package and local shiny applications to quickly generate LATEX PDF reports
- Constructed, populated, and maintained an intranet wiki based using PostgreSQL and PHP to aid in project management and customer service

# **Graduate Research Assistant, Dr. Neal Stewart's Plant Biotechnology Lab** University of Tennessee, Knoxville, TN 2014 — 2016

- Summarized statistical findings of cell suspensions using linear models, ANOVA, and PCA
- Evaluated suspension cultures via chemical and spectral processes for lignin formation and statistically analyzed and summarized my findings for inclusion in DOE reports
- Collaborated on a novel single cell suspension and cryopreservation robotic system

# Laboratory Assistant, Dr. Neal Stewart's Plant Biotechnology Lab University of Tennessee, Knoxville, TN 2012 — 2014

- Developed automated statistical methodology for screening of lignin content and imaging of cell characteristics both *in vivo* and *in vitro*
- Extracted genomes from NCBI, cleaned and normalized the data, and performed exploratory data analysis

#### **III** Statistics

ANOVA Linear Regression PCA/PCoA Markov Chain Clustering Exploratory Data Analysis

vue.js

**jQuery** 

Education

Master of Science in Plant Sciences —Plant Molecular Genetics
University of Tennessee — Knoxville, TN — Spring 2017 — GPA: 3.72/4.0

Bachelor of Science in Plant Sciences —Biotechnology University of Tennessee — Knoxville, TN — Spring 2014 — GPA: 3.74/4.0 Magna Cum Laude