Aaron Doe

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EDUCATION

Master of Science, Bioinformatics and Genomics Program

University of Oregon, Knight Campus Internship Programs (Eugene, OR)

GPA: 4.0

December 2019 (expected)

Bachelor of Science in Physics and Mathematics

University of Oregon, College of Arts & Sciences (Eugene, OR)

GPA: 3.56

June 2018

SKILLS

Programming Languages: Python, R, Bash

• Very experienced with writing programs dealing with image analysis, signal to noise ratio, cluster analysis, power spectrum and periodicity in data, and data visualization.

Bioinformatics Experience: GSNAP, BLAST, Velvet, PhyloSeq, DESeq2, FastQC

 Experienced with a multitude of bioinformatics datasets and workflows, and optimized them to accommodate various analyses and datasets. For example, used DESeq2 to look at differential gene expression under various conditions.

EXPERIENCE

Assembly of fungal and bacterial communities in green roofs over time October 2018 – present Course Research Project, University of Oregon, McGuire Lab

- Analyzed microbial data from New York City green roofs over a seven year period.
- Used R to format and aggregate data coming from multiple sources.
- Conducted multi-dimensional analyses using R to determine how microbial communities have changed in OTU composition over time.
- Used R packages, such as Phyloseq, to look at alpha and beta diversity in 1,200 bacterial and fungal samples.
- Concluded that microbial communities have stabilized in their composition without any human influence, thus giving new insight into how to build more efficient green roofs.

Advanced Projects Lab Assistant

April 2017 - June 2017

University of Oregon Physics Departments

- Built and programmed a self-driving RC car using Python.
- Used parallel programming and machine learning to train the car how to react to environmental input and reach its intended destination.

Intramural Supervisor

May 2016 – present

University of Oregon PE and Rec Department

- Organized and led clinics to train and hire intramural employees.
- Managed all intramural operations on a nightly basis, including conflict management, settling rule disputes, and responding to injuries as well as making crucial decisions.
- Worked with fellow supervisors to improve the intramural program at the university.