AUSTIN N. FIFE

RESEARCH AND DEVELOPMENT TECHNICIAN

PERSONAL STATEMENT

I am passionate for analyzing complex systems to draw insights about the world around us.

WORK EXPERIENCE

Research Assistant - University of Florida *2018 - Dec 2021*
- Cleaned and analyzed multidimensional data produced from analysis of volatile organic compounds via paired Gas Chromatography-Mass Spectrometry (GC-MS).
- Implemented various statistical methods to interpret data, including principal component analyses (PCA), uniform manifold approximation and projection (UMAP), analysis of variance (ANOVA), Chi-squared tests and Generalized Linear Mixed Modeling (GLMM).
- Authored and published 2 journal articles (one in revisions), a technical report, as well as multiple lab protocols and standard operating procedures with RMarkdown.
- Collaborated with over 15 principal investigators from regional universities, state and governmental agencies.
- Trained lab technicians in data entry, methodologies, and standard operating procedures.
- Presented at over 4 scientific conferences, taught class at local 4-H club, organized activities and encouraged handling of live insects during the 6th and 7th Tallahassee Science Festivals, led activities at NFREC-Quincy Arts & Garden Festival as well as NFREC Agriculture Adventures and Ecology Field days.
- Presented chapters on support vector machines (SVM) and PCA for university bookclub about Data Science, AI, Machine Learning, and Deep Learning in R.

Research Assistant - University of Idaho *2015 - 2018*
Used statistical methods in R to interpret results, including t-tests, ANOVA, and GLMMs. Wrote and published thesis with Latex.

Research & Teaching Assistant - Brigham Young University - Idaho *2013 - 2015*

TECHNICAL SKILLS

Programming Languages — **R, Latex, RMarkdown**   Operating Systems — **Windows 10, Linux**
Software — **RStudio, Anaconda, Git, Microsoft Office, Adobe Photoshop**
Hardware — **Raspberry Pi, GC-MS, CMOS Cameras**

GENERAL SKILLS

Problem Solving Collaboration Research Technical Writing Project Management

EDUCATION

PHD: ENTOMOLOGY - UNIVERSITY OF FLORIDA - 3.47 *Anticipated: Dec 2021*
Courses: **Epidemiology & Data Science, Data Storytelling, Vector Biology Models, Impact of Networks (*audited*)**
Spatial Ecology of Insects, Introduction to Applied Statistics

MSc: Entomology - University of Idaho - 3.50   *14 Dec 2018*

BS: Zoology - Brigham Young University - Idaho   *10 Apr 2015*
Courses: **Biostatistics, Readings in Hispanic Literature - Advanced Speaker**