WADE K. COPELAND

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OBJECTIVE

I am a hard-working professional seeking to utilize mathematics, statistics, and computer programming to think about and solve interesting problems.

PROFESSIONAL STRENGTHS

- Expert programmer in R and adept at statistical programming in Python.
- Accomplished in experimental statistics including topics in sampling, estimation, and hypothesis testing.
- Proficient in supervised and unsupervised machine learning methods including topics in parametric statistics, nonparametric statistics, clustering, dimension reduction, and neural networks.
- Fluent using exploratory data analysis techniques to illustrate and explain complex data structures.
- Skilled at producing highly polished reports using Markdown and interactive web applications using R and Python Shiny.

PROFESSIONAL EDUCATION AND CERTIFICATES

Master of Science Degree with a Major in Statistics from the University of Idaho, Moscow Idaho, in May 2011 (GPA 3.65)

Bachelor of Science Degree with a Major in Mathematics from the University of Idaho, Moscow Idaho, in May 2008 (GPA 3.64)

PROFESSIONAL EXPERIENCE

Department of Defense Office of Inspector General April 2021 – Present
Mathematical Statistician *Alexandria, VA*

- Statistician supporting audits, evaluations, and criminal investigations.
- Led the oversight efforts aimed at improving improper payment estimation for the Department of Defense.
- Furthered the DoD OIG oversight mission by creating internal analytics tools for tests of internal control effectiveness, entity resolution, and geocoding.

Institute for Research and Education to Advance Community Health January 2018 – May 2020
Biostatistician *Seattle, WA*

- Faculty in the Community Health program at Washington State University supporting ground-up biostatistics methods for various projects from applying for funding to project end.
- Responsible for methods supporting causal effect estimation and inference in randomized controlled trials.

Fred Hutchinson Cancer Research Center December 2011 – April 2017
Statistical Research Associate *Seattle, WA*

- Biostatistician and R/SAS programmer for various projects in microbial ecology, cancer prevention, solid tumor research, and public health sciences.
- Focus on high-dimensional data analysis techniques using penalized and kernel regression methods as well as various eigenvector methods such as principal component analysis and multidimensional scaling.
- Work on large-scale genome-wide association studies specializing in high-throughput and parallel processing for the analysis of large data sets (upwards of one terabyte flat files and databases).
- Specialization in various -omics, including genomics (SNP, gene expression, and copy number variation), metabolomics, epigenomics, and metagenomics (16S and functional analysis).

· Integration and analysis of public health data from disparate sources, including survey data, accelerometer, pharmacokinetic, and biomarkers.

Initiative for Bioinformatics and Evolutionary Studies August 2009 – May 2011
Graduate Research Assistant *Moscow, ID*

· Lead programmer for the development of an R-based graphical user interface for the analysis of microbial communities.
· Developed application-based methods to apply time series analysis to aligned sequence data, focusing on multivariate data structures.
· Participated in theory- and application-based research in the development of Bayesian methods for the analysis of Terminal Restriction Fragment Length Polymorphisms.

PROFESSIONAL APPLICATIONS

Statistical Programming	R, Python, SAS
Version Control	Git, SharePoint
Document Markup	LaTeX, Markdown, Word
Database	SQL, Excel
Email	Outlook, Google Mail, Apple Mail
Presentations	Beamer, PowerPoint
Operating Systems	MacOS, Windows, Ubuntu Linux, Alpine Linux
Web Applications	HTML, CSS, R Shiny, Python Shiny