

WADE K. COPELAND

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 statistical programmer in R and adept with Python and SQL.
- 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 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
Mathematical Statistician

April 2021 – Present
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.

Amazon.com - Prime Gaming
Data Scientist

June 2020 – November 2020
Seattle, WA

- Provided statistical support for the business through consulting, AB testing, and offer demand forecasting.

Institute for Research and Education to Advance Community Health
Biostatistician

January 2018 – May 2020
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
Statistical Research Associate

December 2011 – April 2017
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/Source Control	Git, SharePoint
Document Markup	L ^A T _E X, Markdown, Word
Database	SQL, Excel
Email	Outlook, Google Mail
Presentations	Beamer, PowerPoint
Operating Systems	MacOS, Windows, Linux/Unix Terminal
Web Development	HTML, CSS, RShiny