MICHAEL PEARCE

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University of Washington, Department of Statistics
Padelford Hall, Box 354322

EDUCATION

University of Washington, Seattle, WA — Sept. 2018 - Present
Ph.D. (anticipated) in statistics
Primary research interests in nonparametric clustering methods and statistical learning theory.
Coursework in statistical inference, machine learning, nonparametric statistics, regression methods, statistical computing, statistical demography, and spatial statistics.
Passed first-year theory exam (June 2019) and research preliminary exam (June 2020).

St. Olaf College, Northfield, MN — Sept. 2013 - May 2017
B.A. in mathematics; concentration in statistics
Graduated *summa cum laude*.
Member of *Phi Beta Kappa* (liberal arts honor society); member and treasurer of *Pi Mu Epsilon* (mathematics honor society).
Mentor for high school students from underrepresented communities through the TRiO Upward Bound program in Minneapolis and St. Paul public schools (2013-14 and 2014-15 academic years).

RESEARCH EXPERIENCE

Research Assistant — Sept. 2019 - June 2020
University of Washington - Department of Statistics
Simulation Study of Nonparametric Clustering Methods
Supervisor: Werner Stuetzle

Statistical Fellow — Sept. 2016 - Sept. 2017
St. Olaf College - Center for Undergraduate Research
Unsupervised Algorithm for Increased Spatial Resolution in Molecular Tagging Velocimetry Images
Supervisors: Rodrigo Sanchez-Gonzalez and Matthew Richey

WORK EXPERIENCE

Boeing Research and Technology — June - Dec. 2019; June 2020 - Present
Applied Statistics Intern

Aided in the development and testing of a non-parametric tail estimation problem with censored data.
Performed regression, ANOVA, and simulation studies to verify manufacturing quality and safety.
Developed a generalized test plan to qualify robotic visual inspection systems.
Coded and implemented new statistical and UI features in a Boeing web app.

Deloitte LLC — Oct. 2017 - Aug. 2018
Analytics Consultant

Verified the accuracy and completeness of complex statistical models using SAS, R, Python, and Excel for a global bank to ensure compliance with regulatory financial stress-testing.
Analyzed anti-money laundering policy, practices, and legal requirements for a global bank, ultimately implementing changes to an existing customer on-boarding system.

PUBLICATIONS

Pearce, M. and Raftery, A.E. *Probabilistic forecasting of maximum human lifespan by 2100 using Bayesian population projections.* Submitted for publication.

Pearce, M.*, Sparrow, Z.*, Mabote, T., and Sanchez-Gonzalez, R. *stoBEST: An Efficient Methodology for Increased Spatial Resolution in Two-Component Molecular Tagging Velocimetry.* Submitted for publication.

**indicates authors contributed equally.*

TEACHING AND MENTORSHIP

Directed Reading Program Mentor
University of Washington
"Nonlinear Regression" — Winter 2020

Teaching Assistant
University of Washington

Elements of Statistical Methods (STAT 311)	Fall 2018, Winter 2019
Introduction to Probability and Mathematical Statistics III (STAT 342)	Spring 2019
Statistical Reasoning (STAT 220)	Fall 2019

Supplemental Instruction Leader
St. Olaf College

Calculus II (MATH 126)	Spring 2017
Modern Computational Mathematics (MATH 242)	Spring 2017

READING GROUP AND LAB PARTICIPATION

Applied Bayesian and Computational (ABC) Statistics Working Group	Sept. 2019 - Present
Statistics Education Reading Group	Sept. 2019 - Present
Statistical Learning Applied to Biostatistics (SLAB) Lab	Sept. 2019 - March 2020
Space-Time Reading Group	Jan. - May 2019

SKILLS

Programming	R (fluent), Python (proficient)
Languages	English (native), Spanish (proficient)