

Adam Elder

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Summary

- Conduct statistical research - network modeling, semi-parametric inference and causal inference
- Strong data preparation and visualization skills
- Excellent written and oral communication ability
- Ability to teach others complex concepts and methods
- Expertise creating data analysis pipelines

Research Experience

2019–Current **University of Washington**, *Research Assistant*, Seattle, WA

- Fit exponential random graph models to understand HIV spread with egocentrically sampled data
- Carry out epidemic simulation on dynamic network models
- Create internal reproducible reports using R-markdown, github, and R
- Construct pipelines that can re-run each step of an analysis with new data, or settings

2018–2019 **Kaiser Permanente**, *Research Assistant*, Seattle, WA

- Use machine learning to identify patients likely to miss appointments
- Interface with management to implement these predictions into Kaiser's healthcare system
- Build a reproducible pipeline to clean electronic medical records, create predictive models, and assess their accuracy using historic data

2018 **Fred Hutchinson Cancer Research Center**, *Research Assistant*, Seattle, WA

- Prepare and publish a manuscript for new methods in hinge models
- Improve computational efficiency for all linear hinge models

2014–2016 **Western Washington University**, *Undergraduate Researcher*, Bellingham, WA

- Conduct independent chemistry research, creating a computer program to model crystal lattices interactions

Professional Experience

2017 **University of Washington**, *Teaching Assistant*, Seattle, WA

- Teach quiz and discussion sections to multiple classes of roughly 30 students
- Provide students with one-on-one help over email or in person during office hours

2016–2017 **Statistics Tutor**, *University of Washington*, Seattle, WA

- Helping undergraduate students understand statistical concepts, and work homework problems

2013–2016 **Western Washington University**, *Math Fellow*, Bellingham, WA

- Work with students one-on-one to solve homework problems for calculus level math classes and above
- Plan and lead workshops introducing students to software and hardware used in upper level math classes

2013–2014 **University of New Mexico HPV Prevention Center**, *Lab Assistant*, Albuquerque, NM

- Organize over 70,000 samples and carry out DNA sequencing with a team of pathologists

Skills

Programming Languages: R, Mathematica

Software: Github, LaTeX, MS Word

Education

Expected 2021 **PhD, Biostatistics**, *University of Washington*, Seattle, WA

2016 **BS, Mathematics**, *Western Washington University*, Bellingham, WA

Awards

2016 **Magna Cum Laude**, *Western Washington University*, Bellingham, WA

Recognition for achieving a GPA in the 97th percentile or above in upper level classes

Publications

- [1] **A Elder**, Y Fong. "Estimation and inference for upper hinge regression models". In: *Environmental and Ecological Statistics* 26 (2019), pp. 287–302

Presentations

Extramural

- June 2020 **WNAR Annual Meeting**, *Western North America Region of the International Biometric Society*
Adam Elder. Variable Screening Based on General Association Measures (oral)

Intramural

- Jan 2016 **Biostatistics Student Seminar Series**, *University of Washington, Department of Biostatistics*
Adam Elder. Variable Screening using Non-Linear Association Measures (oral)

Intramural Service

- 2020-Present **Biostatistics Activities and Events Squad**, *University of Washington, Department of Biostatistics*, (Department Liason)
- Organized events to promote interaction between students and faculty, and build relationships among students.
 - Organize and lead meetings for exam preparation and grant applications.
 - Coordinated with department to obtain funding for events and trainings
- 2020-Present **Statistics in the Community University of Washington Chapter (STATCOM UW)**, *University of Washington, Department of Biostatistics*, (Client Liason and Lead Consultant)
- Client Liason
 - Find and contact potential clients that could benefit from statistical consulting services
 - Assess how well STATCOM can address potential clients needs
 - Help clients frame their needs in the form of a statistical analysis that can be completed in 4-6 weeks.
 - Lead Consultant
 - Provide guidance to the team on the best statistical practices and communication methods for statistical findings.
 - Schedule, Organize, and lead meetings with client
 - Define deliverables, assign responsibilities, and conduct quality assessment.
- 2019-Present **Peer Mentoring Program**, *University of Washington, Department of Biostatistics*, (Mentor)
Organize teams to provide support for first year students (both professional and personal).
- 2017-2018 **Educational Policy and Teaching Evaluation Committee (EPTEC)**, *University of Washington, Department of Biostatistics*, (Member)
- Advise committee on course allocation, new courses, and course content
 - Act as a liaison for the students across all degree programs of the department.