JENNIFER BRENNAN

jrb@cs.washington.edu ∘ (360) 823-9178 ∘ https://homes.cs.washington.edu/~jrb/

RESEARCH INTERESTS

Learning better models with less data through experimental design, active learning and multi-armed bandits

Enabling scientific discovery with improvements in high-dimensional inference and multiple hypothesis testing

Supporting robust inference with false discovery rate control and confidence interval reporting

EDUCATION AND SKILLS

University of Washington Autumn 2017 - Present

PhD Student, Computer Science & Engineering, advised by Kevin Jamieson

- Research focuses on learning statistical mixtures − specifically on achieving better sample complexities by designing new algorithms, and using experimental design to improve existing algorithms
- Coursework in Statistical Learning, Adaptive Machine Learning, Probability Theory, Reinforcement Learning
- Supported by a National Science Foundation Graduate Research Fellowship

Harvey Mudd College May 2016

B.S. in Mathematics & Computer Science

Received the CS Department Service Award (2016) and the Math Department's Alvin White Prize (2014)

Skills

Proficient in Python, R, SQL, C# and Git. Familiar with Mathematica, C++ and JavaScript.

WORK EXPERIENCE

Microsoft − Bing Ads Marketplace and Serving August 2016 - September 2017

Data Scientist *Bellevue, WA*

- Mined system logs using SQL and C# to answer business questions, often in the presence of significant ambiguity
- Designed, executed, and presented studies to provide insight into the Marketplace and Serving stack
- Created machine learning models to provide recommendations for how advertisers should write ad copy

Bloomberg LP Summer 2015

Software Engineering Intern *London, UK*

- Developed a Bloomberg terminal function to visualize the results of daily software tests − wrote front end of the feature from scratch, extended existing back end service, and contributed to database design
- Took second place in internal hackathon; prototyped and developed tool to visualize internal service calls

John McNeil & Co. Summer 2014

Support Scientist Intern *San Diego, CA*

- Modified and improved R software for loading biotech experiment results into a database, via a web interface
- Contributed to XLConnect, an open-source R package for loading Excel files into R

Harvey Mudd College, Department of Chemistry Summer 2013

Researcher *Claremont, CA*

- Using NMR, LC-MS, UV-vis spectroscopy, and air-sensitive techniques, synthesized and developed a metallation procedure for a Methyl Coenzyme M Reductase model compound
- Performed geometry optimizations for 12 model compounds using the San Diego Supercomputer

PUBLICATIONS

Brennan, J., Korlakai Vinayak, R., Jamieson, K., Estimating the number and effect sizes of non-null hypotheses. *International Conference on Machine Learning (ICML)*, 2020.

Rogers, J., Fishberg, A., Youngs, N., Wu, Y. C., Reconciliation feasibility in the presence of gene duplication, loss, and coalescence with multiple individuals per species. *BMC Bioinformatics*, 2017. 18:292.