Jared Galloway

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| Summary Of Qualifications |  | I’ve recently graduated from the University of Oregon where I majored in computer and information science and researched population genetics through the use of large-scale simulations. This year, my interest in biological mechanisms has led me to further explore population genetics as a research assistant in both the [Ralph Lab](https://pages.uoregon.edu/plr/index.html) and [Kern Lab](http://kernlab.rutgers.edu/). My latest project involves training recurrent neural networks with novel data-visualization methods of genealogical history. | |
| Technical Skills |  | * C/C++, C#, Python, Java, R * Basic XML / HTML5 / CSS + JavaScript * Algorithms / Data Structures * LaTeX, Git, Vim | * Linear Algebra, calculus, Discrete Math * Evolutionary simulations, SLiM – msprime * Unix / OS X / bash * Concepts in Machine Learning |
| Relevant Projects |  | **Undergraduate Thesis:**  Using my background in computer science I was involved in the implementation of *TreeSeq in SLiM 3.* This method provides a computationally feasible way to track the genealogical history of samples throughout a forward-moving simulation. The implementation of this method resulted in orders of magnitude speedup for large-scale simulations by avoiding the computationally heavy task of tracking neutral mutations.  **Stickleback Research:**  I have created complex evolutionary models and sampled large data sets for statistical analysis. This has resulted in a case study on the impact of migration-selection on rapid and parallel local adaptation of marine Ninespine Stickleback populations to freshwater pockets in Alaska.  **Deep Learning on Simulated Data:**  My most recent project involves training recurrent neural networks with simulated data to infer and predict population genetics parameters along the genome. | |
| EduCATION |  | Departmental Honors in Computer and Information Science, BS Minor - Product Design  University of Oregon, Eugene OR  Graduation Date: June 2018  Major GPA: 3.99 – Cum GPA: 3.58 | |
| WORK hISTORY |  | Research Assistant, Institute of ecology and evolution, Eugene, or August 2018 - Current Bioinformatics undergraduate Analyst, University of oregon, Eugene, or Sept 2017 - Current Discrete Math grader, University of Oregon, eugene, oR Sept 2016 - 2017 | |

WEBSITE: jaredgalloway.org | GITHUB: github.com/jgallowa07