

Nathan Frederick Bumpus

61 Dresden Avenue
Gardiner, Maine 04345

(207) 313-8581

nathan.bumpus@maine.edu

Summary of Qualifications

- 3.9 GPA through undergraduate and graduate career
- Completed courses in Applied Bioinformatics and Environmental Genomics utilizing large biological system datasets at Mount Desert Island Biological Laboratories 2018
- Attended high performance computing cluster training seminar at Indiana University 2019
- Familiar with bash shell scripting in linux command line, R, Python, SQL and PHP

Relevant Knowledge and Bioinformatics Skills

Programming

- Proficient in python 2 and python 3
- Experienced with R statistical computing environment
- Skilled in linux command line and shell scripting in high performance computing cluster environment
- Designed a small banking relational database using SQL and PHP

Data Analysis

- Completed data analysis projects in python using pandas, numpy, matplotlib and scipy
- Used R for differential expression analysis with DeSeq2 and EdgeR
- Developed a workflow / pipeline for the use of Trinity software on high performance computing cluster at the University of Maine. Webpage can be viewed at <https://nathanbumpus.github.io/Trinity-2.8.4-Marconi/>

Database

- Efficient at data extraction from bioinformatics databases including NCBI, ENA and Uniprot
- Taken courses in database design and querying using SQL and programming database driven websites using PHP and HTML

Laboratory

- Efficient at performing laboratory tasks such as pipetting, making dilutions, centrifugation and operating analyzers
- Performed RNA extractions and built cDNA libraries
- Seven years experience as a Medical Laboratory Technologist

Education

- Professional Science Masters in Bioinformatics, University of Maine Orono, May 2019
- Bachelor of Arts in Biology, University of Maine Augusta, May 2011
- Associates of Science in Medical Laboratory Technology, University of Maine Augusta, May 2010
- Attended Southern Methodist University September 1997-May 2001
- Graduated Kents Hill College Preparatory School May 1997

Employment History

- Medical laboratory technician at Maine General Medical Center March 2016 – May 2018
- Medical laboratory technician at NorDx/MaineHealth June 2012- March 2016
- Medical laboratory technician at Inland Hospital May 2011- June 2012