

Nathan Frederick Bumpus

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Summary of Qualifications

- Completed data analysis projects in Python and R
- Built a pipeline on High Performance Computing Cluster at the University of Maine
- Designed a personal finance application with SQL and PHP
- Obtained seven years of laboratory experience
- Graduated summa cum laude with a 3.9 GPA and awarded Celeste Cote Memorial Scholarship

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

Relevant Knowledge and Skills

Programming and Data Analysis

- Used Python 2 to write a program to encode text files into DNA sequences and then convert the DNA sequences back to readable text
- Performed data analysis on 34 years of United States homicide data using Python 3 with Pandas, Numpy, Matplotlib and Scipy
- Built a pipeline for the use of Trinity software in developing “de novo” transcriptome assemblies on the high performance computing cluster at the University of Maine
- Wrote a personal budget application by designing a relational database with SQL and writing PHP driven websites
- Worked collaboratively on large Daphnia Pulex RNA seq data set using R with edgeR, DESeq2, Pathview and ggplot at Mount Desert Island Biological Laboratory

Laboratory

- Performed RNA extraction and built cDNA libraries using Daphnia Pulex samples at Mount Desert Island Biological Laboratory
- Obtained seven years of experience operating high throughput analyzers as a Medical Laboratory Technologist in hospital and reference laboratories
- Obtained seven years of experience performing standard laboratory procedures including pipetting, centrifugation, making dilutions and aseptic technique as a Medical Laboratory Technologist

Employment History

Medical Laboratory Technologist at Maine General Medical Center in Augusta, Maine March 2016 – May 2018

Medical Laboratory Technologist at NorDx/MaineHealth in Scarborough, Maine June 2012- March 2016

Medical Laboratory Technologist at Inland Hospital in Waterville, Maine June 2011- July 2012